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I. Introduction

Criticisms of public education in lay magazines and other publications have increased many fold in the past 10 years. To some extent this has been good for public education, for no school is as good as it could be or should be. Lay critics can be agents of progress; lay criticism can be a catalyst in the process of creating a more effective public-school system.

On the other hand, public education cannot profit from destructive attacks. One wonders at the sincerity of critics who set up straw men of public education with the words *rubbish, stupid, wretched,* and *worthless* and then proceed to destroy their own creation with calculated blows of apparent logic.

The initial step in counteracting destructive attacks and in utilizing valid criticisms for the improvement of public education is an objective appraisal of each criticism. The purpose of this study is to help toward this end by compiling research information pertinent to 10 selected criticisms of public education.

Research Procedure

From a frequency study of criticisms printed in 30 selected lay magazines over the period July 1954 thru June 1957, some 10 of the most frequently published charges were selected for study. The following bibliographical sources were consulted for research pertinent to the selected criticisms: (a) *Education Index,* (b) *Readers' Guide to Periodical Literature,* (c) *Encyclopedia of Educational Research,* (d) *United States Government Publications Monthly Catalog,* (e) *Research Studies in Education,* and (f) other lists from public and private educational organizations.

In the examination of each charge, the following questions are asked: (a) What are the components of and the evidence bearing on the charge? (b) What facts are revealed by research studies? (c) Is the charge justified in light of research findings?

The research data cited in this report were selected on the basis of the scope, validity, and reliability of the study. Where research studies are not available, opinions, pro and con, from widely recognized authorities are cited.

The concluding statements are based solely on the research contributions cited under each charge.

Organization of This Report

This bulletin is divided into 11 major sections: The introduction states the purpose, procedure, limitations, and organization. The other 10 sections examine the charges under these topics: control of public-school policy, progressive education, life adjustment education, reporting and promotion practices, discipline, foreign languages, science and mathematics, education of exceptionally bright children, moral and spiritual values, and teacher education. The Three R's was also scheduled for study but had to be omitted because of space limitations; also, this topic is treated in many other publications.

This report should be helpful to classroom teachers, school principals, supervisors, and superintendents who are called upon to explain and defend what the public schools are doing.

II. Control of Public-School Policy

Some critics say that the public schools are controlled or dominated by "professional educationists" of schools of education, school superintendents, "experts" in the state departments of education, "specialists" in the U. S. Office of Education, and the national organizations of educationists.

Discussion of the Charge

The proponents of this charge claim that an educational bureaucracy has deprived the public of all basic decisions on the aims and methods of schooling. They claim that the professors of education, who have been elected by nobody, control the public school systems by training, certifying, and placing teachers. Thru national, state, and local leaders of education, the "experts" force upon the schools their aims and methods and admit to classroom service only those who have met the "professional" requirements.

Most leaders of public education see no validity in such a statement. They point out that education is the only profession in which lay people tell the practitioners what to do, that the legislature sets the pattern for teacher

training, that a lay council certifies them, and that a lay board of education hires and fires them.

Years ago, the National Education Association took a strong stand in favor of lay control of the policies governing public education and the execution of those policies thru the professional administration of our schools.[1] Such a policy is still the foundation of the whole structure of public education.

Two basic issues are investigated in this section: (a) the legislative provision for public control of public education and (b) professional responsibility for school administration.

The Legislative Provision for Public Control of Public Education

The Tenth Amendment reserves to the states the powers neither delegated to the federal government nor prohibited to the states by the Constitution. Under the interpretation of this Amendment and the subsequent acts of the states in providing for the exercise of this power with respect to education, the character of public education as a legal function of the states was constitutionally established.

The state legislature is the most important policy-making agent for education in a state. It establishes and maintains an organizational structure for education. It determines the scope of the operation; it sets up programs of study, helps finance education, and certifies teachers. The state school codes represent the totality of legislative statutes governing education.

State authority over public schools is exercised thru state boards of control. In 1954 there were 231 state boards dealing with education in schools and colleges of many types. Of that number, 174 were governing boards, 27 were regulatory boards, and 29 were dual boards.

The chief state school officer is appointed by a board in 18 states, elected by the people in 26 states, and appointed by the governor in 4 states. His duties are statistical, advisory, judicial, supervisory, and administrative.

The local board of education is the working unit in the state educational structure. Local boards of education are vested by state constitutions and statutes with far-reaching and final authority in practically all important matters concerning public education. Within state laws and regulations, they erect buildings, employ teachers, select courses of study and textbooks, determine the length of school terms, fix the amounts to be raised by taxes for schools if fiscally independent, and perform other functions necessary for the effective administration of a public school system.

About 85 percent of the approximately 49,000 schoolboards of the nation are elected by popular vote. The others are appointed in one way or another. A 1946 NEA Research Division study revealed that 1 board member in 3 is a college graduate and 7 in 10 have at least graduated from high school. The larger the city, the higher was the educational level of schoolboard members.[2]

The same study showed that on the noncity boards, farmers are the largest occupational group. On city boards, proprietors and executives constitute the largest group. Housewives are fourth among the occupational groups represented.

Community organizations take active part in proposing candidates for boards of education. The organizations named most frequently in the NEA Research Division study[3] were parent-teacher associations, citizens committees, political groups, service clubs (Kiwanis, Lions, Rotary), labor unions, teachers organizations, women's clubs, taxpayers associations, and church organizations.

In most city school systems, the board of education appoints a superintendent of schools as a professional executive officer to execute the policies of the board of education. In practice, boards often concern themselves with many administrative details which in theory are the responsibility of the superintendent and the staff.

Professional Responsibility for School Administration

Three pertinent factors are considered here: (a) the educators' role in teacher education, (b) the organized profession and control of education, and (c) administrative practices.

Role of teacher training—Kerlinger stated that the university professor of education has

[1] National Education Association. *Addresses and Proceedings, 1921.* Washington, D. C.: the Association, 1921. p. 27.

[2] National Education Association, Research Division. "Status and Practices of Boards of Education." *Research Bulletin* 24: 47-83; April 1946.

[3] *Ibid.*, p. 60.

two main and interrelated functions: (a) the advancement of knowledge, which means research and creative, critical thinking, and (b) the imparting of this knowledge to others.[4] From other sources comes a broader statement of the role of colleges of teacher education: (a) raising academic standards, (b) ensuring quality of classroom instruction, and (c) guidance and personnel services.[5]

The National Commission on Teacher Education and Professional Standards was established by the National Education Association Representative Assembly in July 1946.[6] The Commission was charged with developing a program for improving standards in selection, recruitment, preparation, certification, inservice growth of teachers, and advancement of standards for institutions which prepare teachers.

Organized profession and control of education—Teaching is recognized as a profession. Teachers are represented by state and local associations and by the National Education Association which is a voluntary organization of teachers and administrators of pre-elementary, elementary, secondary, higher, and adult education. But unlike other professions the entire control of education resides outside the profession. The profession has always recognized public control of public education; at the same time it has accepted professional responsibility for improving the administration of education.

While state boards of control of other professions and occupations usually consist of practitioners of the occupation licensed, the agencies controlling admission to teaching consist almost exclusively of members outside the teaching profession. See Table 1.

TABLE 1.—NUMBER OF STATES IN WHICH ALL OR A MAJORITY OF THE BOARD MEMBERS OF THE OCCUPATION LICENSED MUST BE PRACTITIONERS OF THE OCCUPATION LICENSED

Occupation	Number of states[a]
1	2
Attorneys	47
Pharmacists	46 (2)
Optometrists	46 (2)
Physicians	45 (2)
Registered nurses	44 (1)
Dentists	43 (5)
Barbers	42 (3)
Accountants	41 (5)
Beauticians	38 (4)
Architects	34 (6)
Chiropractors	34 (4)
Chiropodists	32 (2)
Teachers	4 (1)

Source: Council of State Governments. *Occupational Licensing in the States.* Chicago: the Council, 1952. p. 84-87.

[a] Numbers in parentheses refer to the number of states in which the composition of the licensing board was not known.

School administrative practices and control of public education—Public-school personnel administration varies from school to school. A 1955 NEA Research Division study of teacher personnel practices in urban school districts found that in 96 percent of the districts the board of education officially voted on appointments of teachers; in 79 percent they officially voted on transfers involving a change in rank or salary; in 22 percent, on transfers not involving a change in rank or salary; and in 86 percent, on extended leaves of absence.

Table 2 gives the percents of teachers and of administrators having various opinions on teacher participation in a number of administrative functions. In general, a greater proportion of administrators than of teachers thought teachers should take part in the functions listed altho there was close agreement between the two groups. Thirteen of the 20 functions were approved for teacher participation by a majority of both teachers and administrators. All these functions are those that touch most directly on the welfare of teachers or on their classroom or extracurriculum activities; the others touch them, for the most part, less directly. More administrators than teachers are satisfied with existing practices of teacher participation in school administration. A greater proportion of administrators than of teachers thought that teachers were interested and willing to take part in administrative functions.

A study at the Colorado State College of Education indicated that 90.0 percent of the college teachers, 77.1 percent of the principals, 61.9 percent of the classroom teachers, 57.1 percent of the supervisors, and 54.5 percent of the superintendents questioned favored lay participation in curriculum revision.[7]

[4] Kerlinger, Fred N. "The Functions of the University Professor of Education." *School and Society* 85: 35-37; February 2, 1957.

[5] American Association of Colleges for Teacher Education. *Tenth Yearbook.* Oneonta, N. Y.: the Association (Exec. Secy.: Edward C. Pomeroy, 11 Elm Street), a department of the National Education Association, 1957. p. 112-42.

[6] National Education Association. *NEA Proceedings, 1946.* Washington, D. C.: the Association, 1946. p. 239-40.

[7] McKune, Esther J. "Do Educators Want Laymen's Help?" *School Executive* 75: 62-65; February 1956.

A survey of 42 superintendents by Van Winkle[8] indicated that the majority of superintendents believed that some school matters are purely administrative and do not concern the public. The majority of the superintendents thought it was true or partly true that school administrators will be more successful when they make decisions on matters over which they have been given responsibility than when they ask a group of citizens to help. The majority believed, or believed with some qualification, that most people are not interested enough to be members of a lay advisory committee which requires a thoro study of a school matter before arriving at a reasonable conclusion. The majority of the superintendents believed that the best possible solutions to school problems are worked out by the schoolboard and the superintendent and, then, that the people should be given a complete report on plans which have been decided.

On the other hand, 45.8 percent of the 3000 parents in an Ohio study declared that the parents should have a say in deciding what subjects are taught in schools, 22.5 percent said they should not, and the rest were uncertain. The majority of the parents included in this study (54.5 percent) had been asked once or more than once to serve on a school committee.

The education profession recognizes the importance of lay participation in public education. For example, in order to further public understanding of the public schools, the National School Public Relations Association was organized in 1935.

The White House Conference on Education was another indication of public and professional cooperation in solving problems of public education. The Conference was held in Washington, D. C., November 28 thru December 1, 1955. The participants were composed of one-third educators and two-thirds noneducators.[9]

[8] Van Winkle, Harold. "Attitudes Toward Lay Participation." *Phi Delta Kappan* 38: 70; November 1956.

[9] Committee for the White House Conference on Education. *A Report to the President*. Washington, D. C.: Superintendent of Documents, Government Printing Office, April 1956. 126 p.

TABLE 2.—PERCENT OF TEACHERS AND ADMINISTRATORS EXPRESSING CERTAIN OPINIONS ON TEACHER PARTICIPATION IN VARIOUS ADMINISTRATIVE FUNCTIONS

Function[a]	Teachers should participate		Present practices of teacher participation satisfactory		Teachers interested and willing to participate	
	Teachers	Administrators	Teachers	Administrators	Teachers	Administrators
1	2	3	4	5	6	7
Curriculum development and revision, selection of textbooks and library books, instructional methods	97%	99%	83%	82%	88%	88%
Pupil personnel policies governing promotions, grouping, cumulative records, marking systems, and discipline	96	97	69	79	86	84
Salary schedules and related policies dealing with leaves, absences, contracts, and school calendar	96	95	78	79	89	91
Philosophy, aims, and objectives of the school; evaluation of the total school program	94	98	52	65	74	71
Teachers meetings; planning dates, time, and subjects	92	96	55	77	80	83
Policies governing the teacher's daily schedule, class load, class size, extra-class duties	92	95	45	66	84	88
Inservice education and professional growth	87	95	46	61	71	70
Pupil personnel policies governing publications, finances, athletics, student government	86	96	58	66	65	69
Policies and programs relating to such student services as health, guidance, special education, psychological services	85	85	47	49	65	66
Selection of school supplies and equipment; budget planning	79	87	64	77	73	75
Information and interpretation of school program to the board, press, citizens committees, and general public	77	94	50	53	60	63
Systemwide coordination and direction of general and special services to insure advancement of instruction	68	78	35	44	57	53
Recruitment, assignment, and orientation of new teachers	67	84	49	60	60	71
Evaluation and rating of teacher's work	43	55	31	35	30	29
Pupil personnel services such as transportation, census, cafeterias, and attendance	40	49	35	40	32	30
Retention, promotion, transfer, and separation of teachers	40	45	31	39	29	33
Selection of local-school administrators	37	41	21	27	32	45
Supervision of instruction	27	24	26	26	21	13
Operation and maintenance of school buildings	24	34	28	34	15	28
Financial accounting, purchasing, storage, and delivery	14	26	27	30	10	20

Source: Dickey, Otis M. *The Professional Attitudes of Teachers and Administrators Concerning Democratic Procedures in Public School Administration*. Doctor's thesis. Denver: University of Denver, 1954. 307 p. (Typewritten)

[a] Listed in order of importance for teacher participation as recommended by teachers.

Many lay organizations influence policy in public education. Some of the more active groups are reported below.

The Parent-Teacher Associations are very much interested in the educational program and help to keep the public informed on school affairs. The National Congress of Parents and Teachers reported a 300-percent increase in membership in the last 10 years.

Citizens advisory committees on education grew from a few dozen known groups in 1940 to over 12,000 groups in 1957.

Such committees have been promoted by the National Citizens Council for Better Schools which succeeded the National Citizens Commission for the Public Schools in 1955. The Council is attempting to help citizens differentiate between school policy, which is citizen-made, and the implementation of policy, in which the professional educators should have the leadership.

The National Association of Manufacturers and the United States Chamber of Commerce are the major spokesmen on educational questions on behalf of American business.

Organized labor has consistently advocated, at all levels, expanded education for all actual or potential students, stronger and sounder programs of equalization, and a more favorable treatment of labor in school instruction.

Other lay organizations active in influencing public education are political groups and organizations, leagues of voters, the service clubs, such as the Kiwanis, Lions, and Rotary; various women's clubs; taxpayers associations; veterans groups, and church organizations.

Summary

Each state in the union is responsible for the support and functioning of its public-school system. The states thru legislation delegate to their local units certain authority to establish and maintain public schools. The people in the local units control their schools thru the elected schoolboard. The schoolboard appoints a professional officer responsible to it and gives him responsibility to carry out its educational policy. The local board establishes and finances its schools, decides on purposes and goals of education, works out a program of studies, and hires teaching personnel.

The degree of public participation and schoolboard control in the planning and executing of the educational program varies with the community. The margin of authority, within which a superintendent or other education officers may act, varies also with the community and its schoolboard.

Studies indicate that (a) the majority of the people in the community desire participation in the education of their children; (b) various lay organizations seek to influence school policy and programs in terms of their own interests; (c) the majority of college professors, superintendents, principals, and teachers desire more lay participation in education; (d) the teaching profession attempts to distinguish between activities regarding public control of education and professional responsibilities of school administration; and (e) the professors of education do not control educational policies; however, they have a definite influence on professional thinking.

III. Progressive Education

Some people say that John Dewey and "progressive education" have taken over the public schools and that this philosophy of education is the chief cause of the crisis in education.

Discussion of the Charge

To some proponents of this charge, *progressive education* means "lack of direction," "children's interests," "do as you please," or "without discipline"; to other critics, progressive education is the result of misapplication of Dewey's philosophy by a small number of extremists in education.

A representative statement by a proponent of this charge is:

> Our efforts toward producing free and originative children through removal of all restrictions in the lives of public-school children have not culminated in the results we expected. . . .
>
> Children, paradoxically, are not happy if they are allowed to behave exactly as they please. . . .
>
> High schools today are crowded with students antagonistic to any attempt at control. This means we have classes of youths living not as co-operative citizen groups, but as individuals of unchecked selfish interests. They have no consideration for others, even for their fellow students; they recognize no authority; they have no respect for com-

munity. A generation nurtured and developed by progressive education has emerged with a firm conviction that no other generation is of the least importance.[1]

The opponents of this charge say that progressive education is the application of scientific methods to learning processes. Basically its ideas come from the writings of John Dewey: (a) Knowledge, skills, and values which define maturity are learned most effectively when they are based on the previous experience of the child and satisfy his current needs. (b) Since individuals differ in all sorts of ways, whatever needs to be learned can be learned best by a variety of methods. (c) Properly aroused interest, related to the natural abilities of the child, furnishes sustaining drive in learning.[2]

Three factors are pertinent to the examination of this charge: (a) a definition of *progressive education,* (b) the extent to which the public schools have espoused this philosophy, and (c) the achievements and research relating to this philosophy.

What Is Progressive Education?

Progressive education is defined as

a reform movement in education (first used in founding the Progressive Education Association in 1919) that represented a protest against formalism and was the outgrowth of a number of psychological, social, and artistic doctrines; more recently, *progressive education* has become identified to a large extent with the pragmatic educational philosophy of John Dewey and with the social doctrines of democracy; emphasizes learning by doing, through purposeful activity on the part of the pupil, with considerable regard for individual differences in interest and capacity and for the freedom necessary to carry out these policies.[3]

Progressive education as a reform movement began in 1919 when a group of teachers and laymen, interested in new methods and educational experiments, formed the Progressive Education Association. The intent was not only to facilitate the exchange of information but also to bring educational improvements to the attention of the public. At that time the Association's main emphasis was on the "child-centered" school.

In April 1924, the first issue of the quarterly, *Progressive Education,* was published by the Progressive Education Association. In that issue, Stanwood Cobb wrote an editorial in which he stated: "Progressive Education commits itself not to any particular system of education, but to progress in education, in all its forms."[4]

In the same issue, Eugene Randolph Smith, then president of the Progressive Education Association, said:

It seems to me that truly "progressive" education must continually be tested by two questions:

Does it keep itself fitted to present day requirements, changing as necessary with changing living conditions and changing needs?

Does it keep apace with investigation and discovery in the educational field, particularly with advances in teaching methods, and with the most recent discoveries in child psychology?[5]

The principles of the Progressive Education Association were listed as freedom to develop naturally; interest, the motive of all work; the teacher a guide, not a taskmaster; scientific study of pupil development; greater attention to all that affects the child's physical development; cooperation between school and home to meet the needs of childlife; and the progressive school, a leader in educational movements.[6]

From 1944 until 1953 the Progressive Education Association was known as the American Education Fellowship. In 1953 the name was changed back to Progressive Education Association. New policy statements were under study by the Association. In July 1955 the Progressive Education Association voted itself out of existence. Its publication, *Progressive Education,* was continued as a bimonthly by the John Dewey Society until July 1957 when it, too, went out of existence due to shortage of funds.

Public Schools and the Philosophy of Progressive Education

In a nationwide survey of classroom teachers in urban areas (2500 and over in population), the NEA Research Division recently asked a question that sheds some light on the charge that the American teacher has been "taken in"

[1] Owen, William. "The Case Against Progressive Education." *Saturday Evening Post,* June 23, 1945. p. 14-15, 53.

[2] Hook, Sidney. "The Case for Progressive Education." *Saturday Evening Post,* June 30, 1945. p. 28-29, 39, 41.

[3] Good, Carter V., editor. *Dictionary of Education.* First edition. New York: McGraw-Hill Book Co., 1945. p. 314.

[4] Cobb, Stanwood. "The New Quarterly." (Editorial) *Progressive Education* 1: 3-4; April 1924.

[5] Smith, Eugene Randolph. "A Message from the President of the Progressive Education Association." *Progressive Education* 1: 5; April 1924.

[6] Progressive Education Association. "The Principles of Progressive Education." *Progressive Education* 1: 2; April 1924.

by the "progressive educator": How would you classify yourself as a teacher? (1) progressive; (2) traditional; (3) partly both, lean toward progressive; (4) partly both, lean toward traditional; (5) don't know or uncertain. Of the 3046 questionnaires returned (61 percent of those sent) 2993 teachers responded as follows:

Progressive	6.9%
Partly both, lean toward progressive	46.4
Partly both, lean toward traditional	43.2
Traditional	3.5
Total	100.0%

These responses indicate that 9 in 10 classroom teachers in the group surveyed classify themselves as neither progressive nor traditional but rather as "partly both." It would seem justifiable to conclude that the vast majority of classroom teachers in the United States are free and independent thinking persons who combine the good from both "traditional" and "progressive" education to fit their own classroom needs.

Research Pertaining to Progressive Education

Studies of the nature of the individual, the nature of learning, methods of teaching, and cultural developments have guided the educational philosophy called progressive education.

The biologists' emphasis on the organic nature of experience gave root to the progressives' stress on taking all factors in child life into account when dealing with the child. The biologists' optimism about the capacity of an individual to grow when provided with an environment conducive to growth made them stress rich environment for optimum growth.[7] The role of endocrine glands in behavior caused the progressives to turn to physical examinations for behavior misfits and those having learning difficulties. The studies by Cannon and Prescott on emotions as they relate to educational processes gave scientific background to contentions that the best education is built on sound emotional lives.[8] The emphasis of Gestalt psychology on wholeness—the awareness of all factors that simultaneously affect learning and insight—provided the basis for emphasizing wholeness in the educational process.[9]

Major emphasis in the progressive philosophy is upon the uniqueness of the individual. Ample research evidence points to differences in emotional commitments, life histories, health, interests, learning capacities in various fields, and rate of growth and development.[10]

Sociological studies of the effects of trends in employment, population mobility, age of marriage, intolerances, and cultural values aid in interpreting the needs of the students.[11]

From the results of research in social psychology, progressive education has gleaned information about educational histories of social misfits; it has, therefore, stressed guidance, vocational orientation and preparation, art experiences, and leisure and social activities.

A small amount of significant research has been directed toward evaluating progressive practices as such. The dynamic, hence illusory, meaning of the word *progressive* renders very difficult the precise definitions of control and experimental factors needed in such studies.

Gates made a comparative study of progressive method and method then currently in use in the first grade. The result was inconclusive.[12] Wrightstone later refined the measurement and observation technics and observed behavior in progressive and nonprogressive classes. Achievement and behavior in progressive groups were equal or superior to achievement and behavior in the control groups.[13]

The Eight-Year Study was launched in 1932 under the auspices of the Commission on

[7] Jennings, Herbert S. *The Biological Basis of Human Nature*. New York: W. W. Norton and Co., 1930. 384 p.

[8] Cannon, W. B. *Bodily Changes in Pain, Hunger, Fear and Rage*. Second edition. New York: D. Appleton-Century Co., 1929. 404 p.
Prescott, Daniel A. *Emotion and the Educative Process*. Washington, D. C.: American Council on Education, 1938. 323 p.

[9] Köhler, Wolfgang. *Gestalt Psychology*. New York: Liveright Publishing Corp., 1929. 403 p.

[10] Freeman, Frank S. *Individual Differences*. New York: Henry Holt and Co., 1934. 355 p.

[11] Benedict, Ruth. *Patterns of Culture*. Boston: Houghton Mifflin Co., 1934. 272 p.
Lynd, Robert S., and Lynd, Helen M. *Middletown*. New York: Harcourt, Brace and Co., 1929. 550 p.

[12] Gates, Arthur I. "A Modern Systematic Versus an Opportunistic Method of Teaching." *Teachers College Record* 27: 679-700; April 1926.

[13] Wrightstone, J. Wayne. *Appraisal of Newer Practices in Selected Public Schools*. New York: Teachers College, Columbia University, 1935. 117 p.

the Relation of School and College, set up by the Progressive Education Association. One hundred and seventy-nine leading colleges and universities agreed to waive their customary entrance requirements for the graduates of 30 progressive high schools. Nearly 2000 graduates of these schools entered the 179 colleges in 1936. The records of 1475 were followed up with painstaking care in 39 colleges. Their work in college was compared with the work of 1475 other students similar to them in every relevant respect except high-school education.

On the basis of the comparison between the 1475 matched pairs, the follow-up staff discovered that the graduates of the 30 progressive schools received a slightly higher total grade average; they did better in all subjects except foreign languages; they earned slightly more academic honors each year; they were more often judged by college faculties to possess clarity, precision, and objectivity in thought, a higher intellectual curiosity and drive, and greater resourcefulness in meeting new situations; they adjusted themselves more effectively to their personal problems; they were more interested in and more active in the arts; they won a higher percentage of non-academic honors every year; they had more definite ideas about their choice of vocation; they demonstrated a more active concern for what was going on in the world.

McCall, Herring, and Loftus conducted a somewhat similar study in elementary schools in New York City.[14] Several schools using progressive programs were paired with conventional schools. McCall and his co-workers concluded that pupils in progressive schools learned academic material more readily and gained in personality development to a marked degree. The main difficulty in all such studies was to make a neat and sharp differentiation between whole schools as progressive and non-progressive since teachers themselves differed so markedly in their approach to their pupils.

Wrightstone matched schools using traditional, formal methods with schools using modern developmental methods.[15] Children from each type of curriculum were paired by grade, chronological age, intelligence, and social background. The *Metropolitan Achievement Test,* Primary II Battery, Form A, was administered to the primary-school children in both types of schools. This test included sections on knowledge and skills in reading, spelling, language, and arithmetic for second- and third-grade pupils. The testing program for the upper elementary grades included administration of the *New Stanford Achievement Tests,* Form W, for reading, language, and arithmetic. Altho the tests showed no sharp differences for either method, they did reveal that achievement under the new practices was equal to or better than achievement under conventional methods of teaching skills and habits in reading, spelling, language, and arithmetic.

Starkey administered standardized tests (the *New California Tests of Mental Maturity* to obtain a measure of intelligence and batteries of the *Metropolitan Achievement Test* to obtain measures of achievement in reading and arithmetic) to more than 600 children of Grades II thru VI in 19 classrooms of two elementary schools in a suburban city. The achievement scores of children taught in a modified curriculum which emphasized child development as well as academic skills were then compared with national norms of scores from schools that were predominantly subject-centered. Differences were not conclusive.[16]

Summary

Progressive education means many things to both its practitioners and its opponents. Altho the organization is out of existence, progressive education in its many concepts and practices, both effective and ineffective, lives on.

The comparative tests cited in this section show that the progressive education concept of educational experimentation based on valid and reliable research into the nature of the individual, nature of learning, methods of teaching, and studies of culture has not caused a crisis in the public schools.

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[14] McCall, William A.; Herring, John P.; and Loftus, John J. "Measuring the Amount of Activity Education in Activity and Control Schools in New York City." *Teachers College Record* 39: 230-40; December 1937.

[15] Wrightstone, J. Wayne. *Appraisal of Newer Elementary School Practices.* Second edition. New York: Teachers College, Columbia University, 1938. 221 p.

[16] Starkey, Mary L. *Status of the Grandview Heights Elementary Schools, 1951, Compared with National Norms in Reading and Arithmetic.* Columbus, Ohio: Grandview Heights Public Schools, 1951. 6 p.

To identify progressive education with any one experiment or group of experiments which succeeded or failed is unreasonable. To discard the concept of progress thru experimentation on the basis of some poorly designed experiments is unwise.

Progressive education has not taken over the public school systems. A great majority of the American public-school teachers—whatever their concept of progressive education may be—have claimed to be neither progressive nor traditional but partly both.

IV. Life Adjustment Education

Some people say that the life adjustment education movement is replacing intellectual training with soft social programs in most public-school systems.

Discussion of the Charge

According to those who make this charge, educators advocate life adjustment education for the majority of high-school students considered incapable of benefiting from intellectual training or training for skilled and desirable occupations. These critics contend that the high school has been transformed into a recreational gymnasium with a gigantic bureau of social and welfare services and that adjustment thru social conformity and accommodation is advocated. Further, they say that group discussions on social problems take emphasis away from the fundamental academic subjects, that intellectual training is replaced by training in social graces, that the result is seen in the poor intellectual quality of high-school graduates, and that the caliber of college freshmen has never been lower.[1]

Supporters of life adjustment education contend that it is designed to help all American youth live a more useful and satisfactory life in a democratic society. This program is aimed especially at the sizable proportion of youth of high-school age whose high-school objectives do not include college preparation or preparation for a skilled occupation.[2] It in no way minimizes intellectual training; rather, it is life education.

Three factors are considered in the investigation of this charge: (a) definition and function of life adjustment education, (b) the effect of life adjustment education on the high-school curriculum, and (c) the academic quality of public high-school graduates.

Definition and Function of Life Adjustment Education

In 1945 at a meeting of the American Vocational Association in Washington, D. C., a discussion of the needs of those high-school students who would neither go to college nor enter the occupations for which high-school vocational courses provided training resulted in the Prosser Resolution; this statement called for conferences to see what could be done.

During 1946 the U. S. Office of Education sponsored five regional meetings to discuss the Prosser Resolution; all conferences approved it. In 1947 the U. S. Office of Education set up a National Commission on Life Adjustment Education for Youth and in 1950 appointed a second commission which was discontinued in 1953.

Life adjustment education is a program designed to equip all American youth with proper skills, knowledge, understanding, and attitudes which will enable them to live more useful and profitable lives. It is concerned especially with the large proportion of boys and girls of high-school age whose major objectives are neither college preparation nor preparation for a skilled occupation.[3] It is designed in part to fill the gap in traditional education by providing useful education to those who are going to become sales clerks, gasoline station attendants, homemakers, ordinary laborers, and so on.

According to Unruh[4] life adjustment education attempts to meet certain needs of all

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[1] Bestor, Arthur E. *Educational Wastelands.* Urbana: University of Illinois Press, 1953. Chapter 6, "'Life-Adjustment' Training: A Parody of Education," p. 81-100.
Smith, Mortimer. *The Diminished Mind: A Study of Planned Mediocrity in Our Public Schools.* Chicago: Henry Regnery Co., 1954. Chapter 2, "Adjustment Replaces Education," p. 22-55.

[2] Unruh, Adolph. "Life Adjustment Education—A Definition." *Progressive Education* 29: 137-41; February 1952.

[3] Hull, Dan J.; Sanford, C. W.; and Mickelwait, Dean W. "A Look Ahead in Life-Adjustment Education." *Bulletin of the National Association of Secondary-School Principals* 37: 318-25; April 1953.

[4] Unruh, Adolph, *op. cit.*

youth. All need instruction in ways to achieve better human relations and to meet civic obligations in consumer education, in work experience, in physical and emotional health, and in international affairs. Similar objectives for life adjustment have been published by the National Association of Secondary-School Principals.[5]

The objectives of life adjustment are neither new nor different. Similar groups of educational objectives for the education of youth may be seen in the numerous lists from Spencer's (1861) to that of the Educational Policies Commission (1938).[6]

Supporters of life adjustment education identify the needs of all American youth but do not specify any standard method to implement the objectives. Each school may devise its program according to its circumstances.

Life adjustment education began with the premise that high schools were not meeting the needs of a large number of students. The great number of high-school drop-outs was presumed to be one result of this neglect. Therefore, life adjustment education was aimed at reducing drop-outs.

This premise must be examined. Warren made a drop-out study of 380 individuals of the class of 1952 in a junior-senior high school.[7] He concluded: (a) tho many less able students stay long enough to graduate, intelligence is a factor in holding power; (b) poor reading ability and a tendency to drop out seem to be connected; (c) participation in extraclass activities seems to help hold students in high school; (d) the financial condition of the student appears to be of minor importance in causing drop-outs; and (e) drop-outs frequently come from homes of unskilled workers and farmers.

Of 255 high-school principals in Massachusetts, 231, or 91 percent, gave the following reasons why students left their schools in 1951-52: (a) preferred work to school, 2441 students; (b) not interested in school, 1251; (c) money needed at home, 621; (d) parents wanted youth to leave, 346; (e) transferred to other schools, 375; (f) entered the service, 333; (g) were failing in schoolwork, 313; and (h) could not learn in school, 300.[8]

Dillon reported the frequency of reasons 957 youth gave for leaving schools. The top five on the list were: (a) preferred work to school, 36 percent; (b) needed money to help at home, 15 percent; (c) not interested in schoolwork, 11 percent; (d) could not learn and were discouraged, 7 percent; (e) were failing and did not want to repeat grade, 6 percent.[9]

The U. S. Office of Education has reported that the retention rate of high-school students has been growing steadily. Table 3 shows that of 1000 children in the fifth grade in 1946-47, 553 were graduated from high school in 1953-54. This is the highest number to date.

Effect of Life Adjustment Education on High-School Curriculum

Douglass offers a typical multiple curriculum organization.[10] This organization is shown on page 144.

Subject requirements and electives are different in every school. The larger schools can afford to offer multiple programs with a large selection of elective subjects. The smaller schools (enrolment 60-175)—over 50 percent of all high schools—cannot afford to offer this variety. The great majority of the American high-school students, however, are in large high schools.

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[5] National Association of Secondary-School Principals, Committee on Curriculum Planning and Development. *The Imperative Needs of Youth of Secondary-School Age.* Bulletin No. 145. Washington, D. C.: the Association, a department of the National Education Association, March 1947. 164 p.

[6] Spencer, Herbert. *Education.* New York: D. Appleton and Co., 1861. p. 32.
National Education Association, Commission on the Reorganization of Secondary Education. *Cardinal Principles of Secondary Education.* U. S. Department of the Interior, Bureau of Education, Bulletin 1918, No. 35. Washington, D. C.: Superintendent of Documents, Government Printing Office, 1918. 32 p.
National Education Association and American Association of School Administrators, Educational Policies Commission. *The Purposes of Education in American Democracy.* Washington, D. C.: the Commission, 1938. 157 p.

[7] Warren, Doron. "Who Are Most Likely To Drop Out of High School?" *School Science and Mathematics* 54: 185; March 1954.

[8] Mack, A. Russell. "A Study of Drop-Outs." *Bulletin of the National Association of Secondary-School Principals* 38: 49-51; February 1954.

[9] Dillon, Harold J. *Early School Leavers, A Major Educational Problem.* New York: National Child Labor Committee, 1949. 94 p.

[10] Douglass, Harl R. *Secondary Education for Life Adjustment of American Youth.* New York: Ronald Press Co., 1952. p. 164-65. (Organization shown on page 144 has been adapted from that given by Douglass.)

TABLE 3.—RETENTION RATES,[a] FIFTH GRADE THRU COLLEGE GRADUATION, IN PUBLIC AND NONPUBLIC SCHOOLS: CONTINENTAL UNITED STATES, 1945-46 TO 1953-54

Grade	Retention per 1,000 pupils in the fifth grade in—												
	1934–35	1935–36	1936–37	1937–38	1938–39	1939–40	1940–41	1941–42	1942–43	1943–44	1944–45	1945–46	1946–47
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Fifth[b]	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Sixth	953	946	954	954	955	963	968	952	954	972	952	959	954
Seventh	892	889	895	901	908	916	910	905	909	914	929	944	945
Eighth	842	839	849	850	853	846	836	834	847	870	858	875	919
Ninth	803	814	839	811	796	781	781	789	807	827	848	872	872
Tenth	711	725	704	679	655	673	697	698	713	745	748	766	775
Eleventh	610	587	554	519	532	552	566	581	604	630[c]	650	662	641
Twelfth	512	466	425	428	444	476	507	514	539[c]	557	549	552	583
High-school graduates	467	439	393	398	419	450	481	488	505	524[c]	522	524	553
Year of graduation	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954
Colleges:													
First-time students	129	119	121	[d]	[d]	[d]	[d]	[d]	205[c]	218	234	266	283
Graduates	51	[d]	[d]	[d]	[d]	[d]	[d]	[d]	[d]	...	...	...	...
Year of graduation	1946	1947	1948	1949	1950	1951	1952	1953	1954	...	...	...	...

Read table thus: Of 1,000 pupils in Grade V in 1934-35, 512 were in Grade XII seven years later, and 467 were graduated from high school in 1942; 51 were graduated from college in 1946.
Source: U. S. Department of Health, Education, and Welfare, Office of Education. "Statistical Summary of Education, 1953-54." *Biennial Survey of Education in the United States, 1952-54.* Washington, D. C.: Superintendent of Documents, Government Printing Office, 1957. Chapter 1, p. 10.

[a] These retention rates are approximate only. Rates for the fifth grade thru high-school graduation are based on enrolments in successive grades in successive years in public elementary and secondary schools and adjusted to include estimates for nonpublic schools; and rates for first-year college enrolment and for college graduates are based on data supplied to the Office by institutions of higher education.

[b] Fourth grade in 11-grade systems; fifth grade in 12-grade systems.

[c] Revised since originally published.

[d] Lack of detailed information regarding veterans makes the calculation of retention rates impossible.

TYPICAL MULTIPLE CURRICULUM ORGANIZATION

Ninth Grade	*College Prep.*	*Stenographic*	*Business*	*General*	*Industrial*	*Domestic*
English I	X	X	X	X	X	X
Social Studies	X	X	X	X	X	X
Algebra I	X					
General Science	X			X	X	X
General Mathematics		X	X	X	X	X
Typing I		X				
Physical Education		X			X	X
General Shop I					X	
Homemaking						X

Electives: Music, Art I, Latin I, General Science, Algebra I, Typing, Shop, Industrial Art, Domestic Art, Modern Language

Tenth Grade	*College Prep.*	*Stenographic*	*Business*	*General*	*Industrial*	*Domestic*
English II	X	X	X	X	X	X
American History	X					
Geometry	X				X	
Biology	X			X	X	X
Typing II		X				
Shorthand I		X				
World History		X	X	X	X	X
Physical Education		X			X	X
Mechanical Drawing I					X	

Electives: Music, Art II, Latin II, Biology, Business Arithmetic, Geometry, Modern Languages, Industrial Art, Domestic Art, Metal Shop I, Wood Shop I, Auto Mechanics I, Printing I, Cooking I, Serving I, Homemaking II.

Eleventh Grade	*College Prep.*	*Stenographic*	*Business*	*General*	*Industrial*	*Domestic*
English III	X	X	X	X	X	X
American History	X	X	X	X	X	X
Algebra II	X					
Physics	X			X		
French I or Spanish I	X					
Shorthand II		X				
Physical Education		X			X	X
Business Mathematics			X			
General Mathematics					X	X
Mechanical Drawing II					X	

Electives: Music, Art III, Latin III, General Mathematics II, Bookkeeping I, Commercial Law, Physics, Algebra I & II, Modern Language, Industrial Art, Domestic Art, Metal Shop II, Wood Shop II, Auto Mechanics II, Printing II, Cooking II, Serving II, Home Art, Physiology

Twelfth Grade	*College Prep.*	*Stenographic*	*Business*	*General*	*Industrial*	*Domestic*
English IV	X			X		
Civics or Economics	X		X	X	X	X
Chemistry	X			X		X
French II or Spanish II	X					
Business English		X				
Office Practice		X				
Physical Education		X			X	X
Business Organization and Law			X			
Retail Selling			X			
Shop Mathematics					X	

Electives: Music, Art IV, General Mathematics II, Trigonometry, Solid Geometry, Journalism, Civics, Economics, Office Machine, Retail Selling, Commercial Art, Modern Language, Chemistry, English, Industrial Art, Home Theory, Machine Shop, Airplane Mechanics, Radio and Electronics, Color Printing, Dietetics, Interior Decorating, Infant Care

Adapted from: Douglass, Harl R. *Secondary Education for Life Adjustment of American Youth.* New York: The Ronald Press Co., 1952. p. 164-65. Copyright, 1952, The Ronald Press Co.

Table 4 is an adaptation of information, published in the *Biennial Survey of Education in the United States: 1948-50,* of the number and percent of students enrolled in certain subject fields in the last four years of public secondary day schools. Enrolments for years 1900, 1922, and 1949 are compared.

These data indicate that in each case, the number and percent enrolled in English and social studies increased; and altho the number increased, the percent enrolled in science, mathematics, and foreign languages decreased.

State legal requirements and, to a certain degree, college entrance requirements determine the offerings of secondary-school subjects. A great majority of colleges standardize their specific requirements for admission to the freshman class in terms of a pattern with a total of 15 Carnegie units of secondary-school work. This pattern usually includes English—3 units, mathematics—2 units (algebra and plane geometry), social studies—2 units, science—2 units, and a foreign language—2 units.[11]

At the present time there is a definite trend toward less rigidity in requirements. Colleges now look more critically at the quality of the student's record and at other evidences of his probable success in college courses than they do at specific courses taken. The trend is to waive specific subjectmatter requirements for applicants from the upper ranks of the high-school classes.[12]

Table 5 shows the number of states requiring instruction in basic subject areas.

Besides the units of instruction in the six subject fields listed in Table 5, several states have other prerequisites for high-school graduation: three states require the teaching of conservation of natural resources; seven states report that teaching the effects of alcoholic drinks and narcotics is a statutory requirement; two states require driver education; eight states require that the pupil follow a program which will assure him two or three years' work in two or more fields. One or two states mentioned fire prevention, first aid and safety, flag education, manners and morals, and principles of agriculture.

The Academic Quality of Public High-School Graduates

The U. S. Office of Education reported that in the fall of 1956, a total of 2,947,000 degree-credit students were enrolled in institutions of higher education and that the first-time enrolment was 723,000, a figure which exceeded all previous highs for the nation.[13] The high schools are sending more graduates to college than ever before. With the increase in enrolment, criticisms of the quality of the freshmen arise. Two items will be examined here: (a) scores on college entrance examinations and (b) achievement and honors earned by public high-school graduates in college.

[11] Spruse, W. Lloyd, and Bradshaw, Francis W. "Colleges and Universities—VI. Admission and Registration." *Encyclopedia of Educational Research.* (Edited by Walter S. Monroe.) New York: Macmillan Co., 1950. p. 262-67.

[12] Irwin, Mary, editor. *American Universities and Colleges.* Seventh edition. Washington, D. C.: American Council on Education, 1956. p. 35.

[13] Johnson, M. Clemens, and Lind, C. George. *Opening Enrollment in Higher Educational Institutions: Fall 1956.* U. S. Department of Health, Education, and Welfare, Office of Education, Circular No. 496. Washington, D. C.: Superintendent of Documents, Government Printing Office, January 1957. 46 p.

TABLE 4.—NUMBER AND PERCENT OF STUDENTS ENROLLED IN CERTAIN SUBJECT FIELDS IN THE LAST FOUR YEARS OF PUBLIC SECONDARY DAY SCHOOLS

Item	1900		1922		1949	
	Number	Percent	Number	Percent	Number	Percent
1	2	3	4	5	6	7
Total enrolment	519,251	...	2,155,460	...	5,399,452	...
Subject field[a]						
English	199,803	38.5%	1,652,232	76.7%	5,015,890	92.9%
Science	435,844	83.9	1,256,822	58.3	2,908,672	54.8
Mathematics	444,437	85.6	1,654,188	76.7	2,955,539	54.7
Languages, foreign	377,570	72.7	1,183,240	54.9	1,180,585	21.9
Social studies	322,958	62.1	981,274	45.6	3,648,950	67.6

Source: U. S. Department of Health, Education, and Welfare, Office of Education. "Statistical Summary of Education: 1949-50." *Biennial Survey of Education in the United States: 1948-50.* Washington, D. C.: Superintendent of Documents, Government Printing Office, 1953. p. 22-23.

[a] Enrolment for each subject field is the sum of the enrolment figures for all courses in the field.

TABLE 5.—SUBJECT REQUIREMENTS OF STATE DEPARTMENTS OF EDUCATION—HIGH-SCHOOL GRADES IX TO XII[a]

Subject	Number of states								
	Number of units							Other[b]	No requirement
	4	3	2½	2	1½	1	½		
1	2	3	4	5	6	7	8	9	10
English	15	22	...	...	...	...	...	...	11
Social studies	...	11	1	16	4	10	1	2	3
Mathematics	...	...	...	1	1	24	...	...	22
Science	...	...	...	4	...	23	...	...	21[c]
Health and physical education	2	...	...	1	...	16	1	12	16[d]
Fine or practical arts	...	...	...	1	...	3	...	...	44

Source: Wright, Grace S. *High School Requirements Established by State Departments of Education.* Circular 455. Washington, D. C.: U. S. Department of Health, Education, and Welfare, Office of Education, September 1955. p. 2.

[a] Includes ninth-grade requirements for Minnesota and Pennsylvania altho these states count only units earned in Grades X to XII to compute graduation requirements.

[b] Instruction is required, but units of credit are not specified.

[c] One state board strongly recommends that a unit of science be required.

[d] Three states strongly recommend that the school require 1-4 years of health and physical education.

A bulletin of the College Entrance Examination Board revealed facts about public and private high-school graduates. Table 6 summarizes the figures. The public-school graduates taking this examination scored higher grades in every area except advanced mathematics and French.

This does not show, however, the superiority of one type of school over the other. A much smaller proportion of public-school than of private-school graduates took the test. The College Board warns that the tests were designed primarily to identify the college candidate who has the mental ability to succeed in college. The tests would have been designed differently if their main purpose were to evaluate secondary-school instruction. However, the figures do seem to show that the young people who prepared to take these tests thru public high-school instruction scored, on the whole, a little better than seniors from private college-preparatory institutions.

Seltzer [14] compared the numbers of Harvard freshmen on the Dean's List and the numbers of failing and passing students and found that students admitted from public schools presented considerably better freshman-year academic records than the private-school students in spite of the fact that there was little or no difference in intellectual potential or in academic background between the two groups.

Wiggin analyzed the top 100 and bottom 100 men in the classes of 1954 and 1955 at Yale University and concluded that it is more likely that the individual public-school graduate will achieve a good academic record than a private-school graduate; Wiggin also suggested as a reason for the superiority of the public-school graduates that only the top public-school graduates are chosen for admission to Yale; thus they are among the superior in "native intellectual ability." While this would account in part for the over-all superiority of the public-school graduate, it cannot account for the better academic record which the public-school graduate makes "relative to his native ability." [15]

Davis and Frederiksen stated that on the average, public-school students did better academic work during the freshman year at Princeton in relation to ability as measured by the Scholastic Aptitude Test—Verbal Section than did private-school graduates.[16]

Conant said that the public high-school graduate does better than the private-school graduate in Harvard College tho he may have considerable difficulty the first year. Two-thirds of those who graduated *magna cum laude* or *summa cum laude* in 1951 and 1952 were from public schools, but of the entire enrolment only half were from public schools. However, Conant qualified his statement with the remark that while only the top quarter of a class of many public schools may apply for admission, all the graduates of a private preparatory school are potential candidates.[17]

[14] Seltzer, Carl C. "Academic Success in College of Public and Private School Students." *Journal of Psychology* 25: 419-31; 1948.

[15] Wiggin, Lewis M. "The Yale Undergraduate: One Man's Findings." *Yale Alumni Magazine,* May 1954. p. 7-9.

[16] Davis, Junius A., and Frederiksen, Norman. "Public and Private School Graduates in College." *Journal of Teacher Education* 6: 18-22; March 1955.

[17] Conant, James Bryant. *Education and Liberty.* Cambridge, Mass.: Harvard University, 1953. p. 131.

TABLE 6.—SCORES ON COLLEGE ENTRANCE EXAMINATION BOARD TESTS, MARCH 1953 [a]

Test	Public schools						Independent schools					
	Boys		Girls		Boys and girls		Boys		Girls		Boys and girls	
	Mean score	Number	Mean score	Number	Mean score	Number	Mean score	Number	Mean score	Number	Mean score	Number
1	2	3	4	5	6	7	8	9	10	11	12	13
Scholastic aptitude test—verbal	488	13,851	490	6,545	489	20,396	483	10,002	493	4,658	486	14,660
Scholastic aptitude test—mathematical	546	13,848	461	6,542	518	20,391	522	10,000	441	4,658	496	14,658
English composition test	498	10,097	547	5,497	515	15,594	499	6,954	537	4,541	514	11,495
Social studies test	527	4,231	505	3,111	518	7,342	509	2,819	500	2,509	505	5,328
French test	516	903	531	2,273	527	3,176	533	1,772	558	2,549	548	4,321
Chemistry test	552	3,599	517	1,119	544	4,718	524	1,581	519	912	522	2,493
Physics test	554	3,459	503	189	551	3,648	528	1,842	487	118	526	1,960
Intermediate mathematics test	534	2,622	540	1,147	535	3,769	495	1,740	514	577	499	2,317
Advanced mathematics test	599	4,908	595	325	598	5,233	598	2,754	606	147	599	2,901

Source: Dyer, Henry S., and King, Richard G. *College Board Scores: Their Use and Interpretation.* No 2. Princeton, N. J.: College Entrance Examination Board, 1955. p. 151-59.

[a] Statistics are presented only from those regions where the indicated test was taken by 100 or more candidates in at least one of four groups: public-school boys, public-school girls, independent-school boys, and independent-school girls, and only for the "final" candidates.

In addition to recent research on this topic, some findings were made more than 30 years ago. The *Proceedings of the Association of Colleges and Secondary Schools of the Southern States,* issued in February 1926, carried a report in which Roemer tabulated the first-quarter or first-semester grades of 13,889 freshmen students at 751 colleges and universities in the South. Of the 13,889 students, 12,414 graduated from public schools and 1475 graduated from private schools. Students from public schools failed 13.7 percent of their courses while students from private schools failed 15.9 percent of their courses.

The records at the Phi Beta Kappa Headquarters in Washington, D. C., indicated that in 1954 more public-school than private-school students were initiated into Phi Beta Kappa in three leading universities. At Harvard, 66 out of 111 (8 unknown) initiated into Phi Beta Kappa were from public schools. Approximately 50 percent of all students at Harvard are from public schools. At Yale University, altho only 45 percent of the student body came from public schools, 45 out of 83 (1 unknown) initiated into Phi Beta Kappa were public-school graduates. At Colgate University, 34 persons were initiated into Phi Beta Kappa in 1954. Thirty of the 34 came from public schools altho only 60 percent of all students at Colgate are public-school graduates.

Newsweek of March 19, 1956, (page 66) reported a survey made by the Educational Department of *Who's Who in America.* The report stated that, for every 27 persons now enrolled in private schools, there is one listed in *Who's Who.* For the public schools one person in *Who's Who* equals 157 students in high school. Thus, the chance of a private-school graduate's making *Who's Who* is six times greater than that of a public-school student.

Summary

Life adjustment education is based on a philosophy born of the problem of universal education; it is a concept—not a method, not a specific subject. Its objectives are neither new nor different, rather life adjustment education is another push toward better education for all American youth to help them live effectively in today's society.

The studies of drop-outs indicate failure of schools to meet certain needs of students. They indicate the schools' lack of challenge for these students. The reduction in the number of drop-outs may be some indication of the success of life adjustment education.

The effect of life adjustment education on the school curriculum is evident both in the increase in the variety of elective courses whenever the schools are able to afford them and in the content of life problems in social studies courses. The decrease in the percentage of enrolment in certain academic subjects is understandable when one examines the system of requirements, electives, and multiple curriculum organizations in our high schools.

The academic subjects have not been "watered down." Available studies show that the average public high-school student who aspires to college entrance is sufficiently grounded in the fundamentals to give a good account of himself when compared with students from independent high schools.

V. Promotion and Reporting Practices

Critics of the public schools say that the spirit of competition, an important incentive for learning, has been eliminated by the 100-percent annual promotion policy and the multiple-standard report card.

Discussion of the Charge

The proponents of this charge state that promoting pupils from grade to grade with little or no consideration of their academic achievement is depriving the boys and girls of an important incentive for doing their best work. The spirit of competition among pupils, once widespread in the public schools, has been virtually eliminated. Schools no longer report to parents the comparative standing of their children.

The supporters of automatic promotion and the multiple-standard report card say this: It is possible, tho not certain, that high rates of nonpromotion will uphold academic standards. But the school program and the methods of teaching should be adapted to children as they are and not to a mythical standard of academic achievement. On the basis of this philosophy of education there is

no defense for any administrative policy except that of 100-percent promotion.[1] However, relatively few schools today practice automatic promotion, and many educators do not support the idea.

Two factors will be considered in the investigation of this charge: (a) concepts of promotion and reporting, and (b) reporting and promotion practices in the public schools.

Concepts of Promotion and Reporting

Promotion and nonpromotion — According to dictionaries *promotion* is moving a pupil from a grade, which he has satisfactorily completed, to the next grade. The interpretation of *satisfactory completion of a grade* ranges from achievement of a rigid academic standard to a policy of automatic, no-standard promotion. Between these two extreme interpretations are many types: annual promotion, conditional promotion, double promotion, enrichment promotion, flexible promotion, individual promotion, probationary promotion, quarterly promotion, rapid promotion, selective promotion, semester promotion, and subject promotion.

Several studies have been conducted on the various effects of promotion and nonpromotion. The purpose of promotion has been re-evaluated. The following are a few of the most pertinent research studies which caused public schools to move away, in different degrees, from the rigid promotion practices.

In a study of 60 repeaters of the first grade, Arthur discovered that the average repeater did not learn more in two years than the average nonrepeater of the same mental age learned in one year.[2]

McKinney concluded that only 35 percent of the elementary-school repeaters actually did better work the second time, that 53 percent did not improve, and that 12 percent did poorer work.[3] A study by Keyes[4] showed similar results.

In a Long Beach public schools study, two groups of potential failures were equated. One group repeated the grade, and the other group was promoted on trial. Educational tests were given both groups. It was found that the children of normal ability gained more from trial promotion than the children of equal ability who repeated the grade. Children of less than average ability gained a little more by repeating the grade than they did by trial promotion.[5]

Farley, Frey, and Garland[6] concluded that nonpromotion was more likely to be a deterrent than an impetus to acceptable achievement. They compared pupils of like IQ's who had repeated several grades with pupils who were kept with those of approximately their own age.

To examine the effect of the threat of failure on school achievement, Otto and Melby tested two equated groups of pupils in Grades 3A to 5A. They found that those children who were told they would not be promoted if they did not work diligently did no better than the pupils who were told they would be promoted regardless of their efforts.[7]

Other studies found among other things that (a) nonpromotion did not result in homogeneity of achievement[8] and (b) nonpromotion usually intensified children's emotional instability.[9]

The conclusions drawn from certain other studies, however, are less favorable to the policy of 100-percent promotion.

Newlun suggested that 100-percent promotion has an adverse effect on pupils of normal intelligence. These pupils discover that they will be promoted whether they learn anything or not and, therefore, learn to get by without doing their best work.[10]

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[1] McGaughy, J. R. *An Evaluation of the Elementary School.* Indianapolis: Bobbs-Merrill Co., 1937. p. 294-97.

[2] Arthur, Grace. "A Study of the Achievement of Sixty Grade I Repeaters as Compared with that of Non-Repeaters of the Same Mental Age." *Journal of Experimental Education* 5: 203-205; December 1936.

[3] McKinney, B. T. *Promotion of Pupils a Problem of Educational Administration.* Doctor's thesis. Urbana: University of Illinois, 1928.

[4] Keyes, Charles H. *Progress Through Grades of City Schools.* New York: Teachers College, Columbia University, 1911. p. 79

[5] Klene, Vivian, and Branson, E. P. "Trial Promotion Versus Failure." *Educational Research Bulletin* 8: 6-11; January 1929.

[6] Farley, Eugene S.; Frey, Albin J.; and Garland, Gertrude. "Factors Related to the Grade Progress of Pupils." *Elementary School Journal* 34: 186-93; November 1933.

[7] Otto, Henry J., and Melby, Ernest O. "An Attempt To Evaluate the Threat of Failure as a Factor in Achievement." *Elementary School Journal* 35: 588-96; April 1935.

[8] Saunders, Carleton M. *Promotion or Failure for the Elementary School Pupil?* New York: Teachers College, Columbia University, 1941. p. 44.

[9] *Ibid.*, p. 11.

[10] Newlun, Chester O. "Who Fails in Your Schools?" *American School Board Journal* 123: 13-14; August 1951.

Gordon [11] and Elliott [12] questioned continuous promotion for slow-learning pupils. Promotion by chronological age often placed slow-learning pupils in a situation where, even when their individual activities were suited to their capacities, the group activities would be far beyond their intellectual level. Gordon and Elliott both believe that such a situation may contribute to mental and emotional instability among the slow learners.

Taylor said his investigations showed that eighth-grade children were more likely to pick their playmates on the basis of similar mental level rather than on the basis of similar chronological age. Taylor believed the basic reason for a 100-percent promotion was the assumption that children pick their playmates chiefly because they are of approximately the same age. According to Taylor, this is not true.[13]

Reporting student progress—Two basic questions must be answered in reporting on pupil progress. What shall be the standard of evaluation? By what means can this information be most efficiently and effectively communicated?

There are three major standards of evaluation: (a) individual standards, (b) class standards, and (c) standardized scores.

When parents in Walled Lake were asked to state the ***kind of information*** regarding school achievement they wanted, the largest group (34 percent) said they wanted to know how the child achieved according to his own ability. The next highest percent of parents (28 percent) wanted to know how much effort their child was making to obtain his education. Only 13 percent wanted to know how their child compared with other children in his class.[14]

The standard used in the evaluation of pupils largely determines the method of reporting. There are four main types of instruments used in reporting to parents: (a) report cards or booklets, (b) narrative or letter reports, (c) conferences between parents and teacher, and (d) combinations of different reporting methods.

The parents in Walled Lake were asked in 1951 what ***type of report*** they wanted. The majority of the parents (66.1 percent) wanted the 5-point rating scale (A, B, C, D, E) on a standard report card; those who wanted a number grade based on 100 percent on a standard report card and those who wanted an informal letter written by the teacher and sent home periodically were equal in number (11.5 percent each). The smallest number of parents wanted a conference between teacher and parents held periodically.[15]

Whittenburg asked superintendents which plan of reporting they liked. The largest group (29 percent) favored a combination of report card, letter, and conference. The next greatest number favored a combination of report card and conference. The smallest number of superintendents favored a report card only or a descriptive letter only.[16]

Reporting and Promotion Practices in the Public Schools

Promotion practices—School surveys have shown that the small school systems tended to promote annually and the large school systems tended to promote semiannually.[17] Now the practice of annual promotion is growing since comparative studies indicate that semiannual promotion has little if any advantage over annual promotion.

Otto reported that out of 1702 elementary-school classroom teachers questioned, 10.5 percent failed only those who, they believed, were sure to profit by retention. While 7.5 percent of the teachers used chronological age as a major factor in promotion, only 1.6 percent of the teachers practiced 100-percent promotion.[18]

[11] Gordon, J. Berkeley. "Mental-Hygiene Aspects of Social Promotion." *Mental Hygiene* 34: 34-43; January 1950.

[12] Elliott, Lloyd H. "Promote All—In the Public Schools?" *Educational Forum* 13: 69-72; November 1948.

[13] Taylor, Edward A. "Some Factors Relating to Social Acceptance in Eighth-grade Classrooms." *Journal of Educational Psychology* 43: 257-72; May 1952.

[14] Metropolitan Detroit Bureau of Cooperative School Studies. "What Do Parents Want? Walled Lake Attempts To Find Out!" *Action* 4: 9; February 1951.

[15] *Ibid.*

[16] Wittenburg, Clarice. ***Existing Home and School Relationship Practices at the Elementary Level.*** Laramie: University of Wyoming, Bureau of Educational Research and Service, 1949. 44 p.

[17] Billett, Roy O. ***Provisions for Individual Differences, Marking, and Promotion.*** U. S. Department of the Interior, Office of Education, Bulletin 1932, No. 17, Monograph 13. Washington, D. C.: Superintendent of Documents, Government Printing Office, 1932. 472 p.

[18] Otto, Henry J. ***Promotion Policies and Practices in Elementary Schools.*** Minneapolis: Educational Test Bureau, 1935. p. 25.

TABLE 7.—PERCENT OF LOSS IN ENROLMENTS FROM GRADE I TO GRADE II, FROM GRADE V TO GRADE VI, AND FROM GRADE X TO GRADE XI, SELECTED YEARS

Item	1944–45	1949–50	1953–54
1	2	3	4
Percent of loss in enrolment from Grade I the previous year to Grade II of the current year	21%	14%	12%
Percent of loss in enrolment from Grade V the previous year to Grade VI of the current year	3	2	3
Percent of loss in enrolment from Grade X the previous year to Grade XI of the current year	19	15	11

Source: Based on: U. S. Department of Health, Education, and Welfare, Office of Education. "Statistical Summary of Education, 1953-54." *Biennial Survey of Education in the United States: 1952-54.* Washington, D. C.: Superintendent of Documents, Government Printing Office, 1957. Chapter 1, p. 24.

The number of pupils repeating grades in the elementary school is decreasing. In 1909 Ayres [19] reported the average rate of failure in all grades to be 16 percent. Caswell [20] reported 10 percent in 1933. Saunders in 1941 [21] reported that during a period of approximately 20 years the average rate of failure in large cities dropped from 8.7 in the early 1920's to 4.0 percent in 1938-39. A similar downward trend in the number of failures was reported in the secondary schools.[22]

Table 7 shows the enrolment loss in Grades II, VI, and XI in 1944-45, 1949-50, and 1953-54 as compared with the enrolment of the preceding grade in the previous year. However, this does not indicate that the differences in numbers represent the number of student failures. Consideration must be given to transfers into or from private schools, moving out of the country, death, and other factors.

Lennon and Mitchell [23] reported that there is also an indication of a decline in the average age of children grade by grade. For example, in 1918 the mean chronological age of children in the fifth grade was 11 years and 6 months; in 1926, 11 years and 1 month; in 1940, 10 years and 8 months; in 1946, 10 years and 7 months; and in 1952, 10 years and 5 months. Even with an indication of decreasing numbers of failures, Jones reported that an average of about 10 percent of the public-school pupils are repeaters.[24]

Reporting practices—Roelfs concluded from his study that (a) none of the junior high schools studied indicated complete reliance on informal methods such as diagnostic letters, parental conferences, and the like; (b) the majority of the schools (82 percent) used letters or numbers explained by words or phrases as the basis for their marking of subjectmatter achievement; (c) A, B, C, D, F marking was used by 81 percent of the schools; and (d) 49 percent of the reports were being issued every six weeks and 45 percent, quarterly.[25]

In May 1955, the California Bureau of Elementary Education mailed to 99 superintendents of California city school districts questionnaires dealing with practices in reporting pupil progress. Twenty-seven of the 90 respondents said they used report cards only; 54 used report cards with parent conferences; 1 used parent conferences only; 8 used various patterns at different grade levels.[26]

On the basis of a study in 1933-34, Otto indicated that 49.47 percent of the teachers used rank in class as a standard against which to rate the work of an individual pupil. The second largest number of teachers (17.17 percent) used standard tests as a measure for rating the work of an individual pupil. Only 8.41 percent of the teachers used capacity of the

[19] Ayres, Leonard P. *Laggards in Our Schools.* New York: Russell Sage Foundation, 1909. p. 141-58.

[20] Caswell, Hollis L. *Non-Promotion in Elementary Schools.* Field Studies, No. 4. Nashville, Tenn.: George Peabody College for Teachers, Division of Surveys and Field Studies, 1933. p. 24.

[21] Saunders, Carleton M., *op. cit.* p. 14.

[22] Archer, Clifford P. "Secondary Education.—II: Student Population: Pupil Failure." *Encyclopedia of Educational Research.* Revised edition. (Edited by Walter S. Monroe.) New York: Macmillan Co., 1950. p. 1159.

[23] Lennon, Roger T., and Mitchell, Blythe C. "Trends in Age-Grade Relationship: A 35-Year Review." *School and Society* 82: 123-25; October 15, 1955.

[24] Jones, James J. "Recent Trends in Promotional Theory." *Progressive Education* 33: 5-6, 15; January 1956.

[25] Roelfs, R. M. "Reporting Pupil Progress in the Junior High School." *Bulletin of the National Association of Secondary-School Principals* 38: 71-79; May 1954.

[26] Heffernan, Helen, and Marshall, Lorene E. "Reporting Pupil Progress in California Cities." *California Journal of Elementary Education* 24: 67-77; November 1955.

child as a gauge for ranking the work done by an individual.[27]

Summary

Studies on promotion practices indicate that the number of schools practicing 100-percent promotion is as small as the number of schools practicing a rigid standard of promotion. Surveys of schools indicate a trend away from rigid academic promotion practices to a more flexible multiple-standard policy.

Reporting to parents on the progress of elementary-school pupils is most commonly done by means of a report card using a five-letter system. This system tends to put pupils on a competitive basis. Some schools use only two marks—pass or fail, or satisfactory or unsatisfactory. In elementary school, conferences, letters, and report cards are used in various combinations, and consideration of individual capacity and achievement is more prevalent than in secondary schools.

Altho the studies are not conclusive, they indicate a warning against rigid arbitary promotion standards as well as against indiscriminate promotion.

[27] Otto, Henry J., *op. cit.*, p. 41.

VI. Discipline in the Public Schools

Some critics of the public schools say that lax discipline in the public school is contributing to the increase of juvenile delinquency.

Discussion of the Charge

The proponents of this view believe that a major cause of the increase of juvenile delinquency lies in the advent of newer concepts of discipline in the 1930's. They claim that many teachers and schools abolished all methods of overt physical discipline and as a result classroom conduct disintegrated. These persons contend that giving inexperienced children the exclusive responsibility for their own behavioral guidance and character development is not only absurd but criminal.

The defenders of the public schools maintain that the schools have always accepted their share of responsibility for the proper growth and development of American youth. These persons point out that other social agencies, such as the home, churches, libraries, and health and recreation departments, have a common aim of helping children and young people grow up successfully. While objecting to the schools' shouldering the entire responsibility, these persons realize that of all institutions, except the family, the schools must carry the heaviest responsibility for helping children develop acceptable patterns of behavior. The schools reach more of the children than any of the other social agencies.

Defenders of the public schools say that the newer concepts of discipline are supported by psychological and educational research. They point with pride to the majority of pupils who are making a successful and profitable adjustment to life. They contend that a new concept of discipline in the public schools is not contributing directly to the increase in juvenile delinquency but that the increase is due to a complex of social ills.

Three factors are important to this investigation: (a) the concept of discipline, (b) the status of discipline in the public schools, and (c) relationship of school disciplinary practice to juvenile delinquency.

The Concept of Discipline

Dictionaries give at least four meanings of *discipline*: punishment, enforced obedience, training, and instruction. Oliva compiled a list of 25 different definitions of discipline advocated by various public-school authorities.[1] Some of the definitions he listed are (a) the creation and preservation of conditions essential to work, (b) self-control, (c) preparation for adult citizenship, (d) intelligent obedience, (e) training and learning acceptable behavior, (f) amount of control a teacher has over her group, (g) enforced obedience, and (h) control and direction of energy that produces behavior.

[1] Oliva, Peter F. "High School Discipline in American Society." *Bulletin of the National Association of Secondary-School Principals* 40: 5-6; January 1956.

Bagley presented the new concept of discipline by tracing the evolution of discipline thru five steps.[2] According to Bagley, early concepts of educational discipline involved the concept of original sin. When a child misbehaved, it was because of the evil spirit within him. Discipline was imposed retribution and corporal punishment; this was discipline based on vindictive punishment. Next came the idea of fitting the punishment to the crime; this was the concept of proportionate punishment. The third step was the concept of protective punishment; the idea was to protect society and the offender. This was followed by reformatory punishment or rehabilitation of the individual to society. Finally, the prevention of misbehavior, maladjustment, and crime, thru a positive approach emphasizing wholesome activities and the learning of self-control, is a major phase of the modern concept of discipline. According to Bagley, all five concepts of discipline are practiced in presentday culture, and the schools are using adaptations and various combinations of these five concepts.

The Status of Discipline in Public Schools

The statutes of states and regulations of schoolboards give principals and teachers responsibility and authority to maintain order in the schools. Within this framework discipline programs vary from school to school depending upon differences in educational philosophy and discipline objectives.

Some schools conceive of discipline as being largely restrictive and negative. Pupil control in these schools is usually maintained by rules and regulations governing pupils' behavior accompanied by penalties for violations of these rules. The penalties most commonly imposed are detention after school, withdrawal of privileges, reprimand, suspension, imposing special tasks, expulsion, and corporal punishment.

Other schools base discipline upon concepts of developmental psychology and regard discipline as a learning process by which the pupil is guided in the development of self-control and in the recognition of his responsibilities to himself and to his group. This program emphasizes prevention as well as correction of misbehavior. When undesirable behavior does occur, the practice is to study the pupil and his background and to attempt to remedy the conditions which led to the misbehavior. The penalties for misbehavior are corrective in nature and directly related to the misdeed. Along with the immediate remedial action a long-term program of learning experience is initiated to stimulate desirable behavior.

A questionnaire study of teacher opinion on pupil behavior was conducted by the NEA Research Division in 1956.[3] The study revealed the following:

1. When asked if pupil behavior in their area was as bad as has been portrayed thruout the country by press, movies, and radio, 69.4 percent of the 4270 teachers replied "not nearly so bad."

2. To a question about the percent of pupils in classes who were trouble makers, 29.2 percent said none, 35.0 percent said less than 1 percent, and 22.8 percent said 1 to 4 percent.

3. Only 1.6 percent of the teachers reported that an act of physical violence against themselves had occurred in their school that year.

4. Pupils were classified as exceptionally well-behaved by 46.9 percent of the teachers where living conditions in the school neighborhood were very good but by only 14.8 percent in slum areas.

5. Altho it is apparent that the great majority of parents cooperate with the school on their children's behavior problems, 4.3 percent of the teachers reported that in the majority of cases they received no cooperation from home, and 1.0 percent of the teachers reported that the parents hardly ever cooperated. Only 8.1 percent of the teachers reported pupils as a whole exceptionally well behaved when parents fail to cooperate with the school in solving behavior problems.

6. Many teachers thought that the school should return to the practice of administering a spanking when other measures fail to produce results (elementary school). Others reported that altho they seldom would actually use this form of punishment, they need the authority to use it as a last resort. Others frown on this practice, saying it is barbaric and has no place in modern school life. The study revealed that in 3 out of 4 schools the principal had such authority, and in almost half the schools the classroom teacher also had the authority.

7. A majority of the teachers (72.3 percent) reported that the classroom teachers had an important voice in determining the discipline policies of their school; while 61.8 percent said they had an important voice in determining discipline policies of their school system.

The teachers were asked about misbehavior then (1955-56) as compared with misbehavior 10 years ago and 20 years ago, by type and rel-

[2] Bagley, William C. *School Discipline.* New York: Macmillan Co., 1916. p. 179-85.

[3] National Education Association, Research Division. "Teacher Opinion on Pupil Behavior, 1955-56." *Research Bulletin* 34: 51-107; April 1956.

ative frequency of occurrence. Table 8 was taken from the study. Acts of misbehavior which seem to be on the increase include drinking intoxicants, failure to do homework and other assignments, and impertinence and discourtesy to teachers. Table 8 also shows that there has been some decrease in truancy, stealing small items, obscene scribbling in lavatories, unorganized fighting, and physical violence against teachers.

Cutts and Moseley (1939) studied the behavior of 1000 boys and 1097 girls in seventh-grade classes of eight junior high schools of four different states.[4] The top five kinds of misbehavior according to the frequency of occurrence among the boys were talking, physical attack, undue activity, throwing things, and unexcused absence. The top five kinds of misbehavior among the girls were talking, chewing gum or eating candy, undue activity, physical attack, and immorality.

Henning studied the seriousness and frequency of behavior problems as viewed by 225 high-school principals.[5] The principals listed the following four types as most serious: lying, showing disrespect for faculty supervision and authority, committing petty thievery, and congregating in lavatories and halls. The five most frequently mentioned types of misbehavior were congregating in lavatories and halls, running in corridors and on stairs, misbehavior in class, wasting school property, and showing general rudeness and inconsideration for other students.

School Disciplinary Practices and Juvenile Delinquency

Juvenile delinquency is a legal term and its specific meaning comes from law. As defined in most statutes, it is the violation of a law or municipal ordinance by persons within the age jurisdiction of juvenile courts; or it is conduct on the part of such persons so seriously antisocial as to interfere with the rights of others or to menace the welfare of the delinquent himself or of the community. Consequently, the acts which can result in a child's being brought before the court may range from trivial to serious misbehavior.

The number of delinquency cases rose during World War II to a peak in 1945. There was a downward trend for three years after the

[4] Cutts, Norma E., and Moseley, Nicholas. *Practical School Discipline and Mental Hygiene.* Boston: Houghton Mifflin Co., 1941. p. 310.

[5] Henning, Carol J. "Discipline: Are School Practices Changing?" *Clearing House* 23: 267-73; January 1949.

TABLE 8.—TEACHER OPINION ON MISBEHAVIOR NOW (1955-56) AS COMPARED WITH 10 YEARS AGO AND 20 YEARS AGO, BY TYPE AND RELATIVE FREQUENCY OF OCCURRENCE

Type of misbehavior	The act NOW, as compared with 10 years ago, is occurring:				The act NOW, as compared with 20 years ago, is occurring:			
	More frequently	Less frequently	About the same	No occurrence—then or now	More frequently	Less frequently	About the same	No occurrence—then or now
1	2	3	4	5	6	7	8	9
Impertinence and discourtesy to teachers	50.0%	15.2%	28.9%	5.9%	55.1%	18.1%	21.6%	5.2%
Failure to do homework and other assignments	43.2	8.2	45.3	3.3	49.6	9.9	37.9	2.6
Destruction of school property	35.7	27.0	30.2	7.1	41.9	29.5	22.8	5.8
Drinking intoxicants	34.4	5.8	17.5	42.3	38.7	7.9	12.1	41.3
Using profane or obscene language	30.8	17.5	41.8	9.9	35.0	20.6	35.3	9.1
Stealing of a serious nature (money, car thefts, etc.)	30.7	16.0	29.8	23.5	40.1	17.5	22.7	19.7
Sex offenses	23.4	8.5	30.6	37.5	29.8	9.9	25.9	34.4
Truancy	22.7	29.5	37.1	10.7	28.8	33.1	30.8	7.3
Cheating on homework	20.8	10.5	62.5	6.2	25.5	12.0	56.3	6.2
Gang fighting	20.3	12.7	15.9	51.1	24.1	14.5	13.1	48.3
Cheating on tests	20.0	13.8	60.8	5.4	24.1	15.5	56.1	4.3
Lying of a serious type	18.8	17.8	52.7	10.7	24.2	19.1	46.9	9.8
Using narcotics	18.5	3.7	10.1	67.7	21.6	5.0	6.5	66.9
Stealing (small items of little value)	17.8	22.6	54.6	5.0	25.3	25.5	45.5	3.7
Carrying switch-blade knives, guns, etc.	17.5	8.8	12.9	60.8	22.0	9.8	10.0	58.2
Obscene scribbling in lavatories	14.8	36.6	39.7	8.9	20.6	38.7	33.8	6.9
Unorganized fighting	12.0	26.9	48.2	12.9	15.4	30.1	43.3	11.2
Physical violence against teachers	9.0	14.0	15.8	61.2	13.2	15.7	13.2	57.9

Source: National Education Association, Research Division. "Teacher Opinion on Pupil Behavior, 1955-56." *Research Bulletin* 34: 90; April 1956.

war. Beginning in 1949 there was an upward trend each year thru 1955. By 1955, the level was 70 percent higher than in 1948. It is estimated that in 1955 roughly 2 percent of the child population aged 10 thru 17 were brought before juvenile courts because of delinquent behavior.[6]

The rise in delinquency cases cannot be explained in terms of population growth alone. The 70-percent increase in court cases between 1948 and 1955 compares with a rise of only 16 percent in child population 10 thru 17 years of age.

Kvaraceus[7] and Vedder[8] concluded that schools are full of predisposing stimuli which elicit aggression responses on the part of the maladjusted child. Gnagey stated that literature on juvenile delinquency revealed, on the whole, a rather unsatisfactory school adjustment for most delinquents. Retardation is usually high; low school achievement and poor marks are the rule; truancy is frequent; and early school leaving is often the delinquent's means for escaping this situation.[9]

Schools are attempting in various ways to cope with the problem of delinquency: (a) Teachers are trained to take individual differences into consideration in their teaching process. (b) The schools and community agencies coordinate their efforts in and out of school. (c) Guidance programs are operated in the schools. (d) Multiple-curriculum programs are an attempt to meet the needs of various types of students.

Studies have shown that misbehavior has many causes. For example, the NEA Research Division's study on pupil behavior[10] revealed that sheer "bigness" of the educational enterprise and trouble with pupils seem to go hand in hand; teachers with more experience tend to have less and less trouble with pupils; neighborhoods in which living conditions are below average are likely to produce children and youth who create serious problems in school; and the factors most frequently associated with misbehavior in school, in the opinions of classroom teachers, are related to irresponsible parents, unsatisfactory home conditions, and lack of parental supervision due to mothers' working outside the home.

Summary

The number of cases in the juvenile courts has increased since World War II. Some teachers have reported increases in certain types of misbehavior in the past 10 or 20 years. But teachers also report that publicity in press and radio is grossly one-sided. Classroom delinquents are, at the most, less than 1 percent. Juvenile delinquency on the national level is below 2 percent.

The schools are concerned with behavior problems. Guidance programs are emphasized; student organizations are utilized to create an environment for better behavior. Curriculum programs have been utilized to cope with behavior problems. The so-called "new concept" of discipline is more discussed than practiced. Most schools have provision for corporal punishment; however, this form of punishment is not as widely used as formerly. Most schools use various methods and kinds of punishment to cope with behavior problems.

Good behavior must be learned. A rational being learns best by reasoning. External controls are necessary with immature individuals, but the teacher works patiently toward the child's development of internal control. Many teachers appear to avoid disciplinary problems by simple classroom control.

The behavior of children and youth cannot be separated from the behavior of people in general. Theirs is a part of a total pattern. Boys and girls acquire habits and standards of conduct from their parents and the adults with whom they associate.

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[6] U. S. Department of Health, Education, and Welfare, Social Security Administration, Children's Bureau. *Juvenile Court Statistics, 1955.* Children's Bureau Statistical Series No. 37. Washington, D. C.: the Bureau, 1956. p. 6-7.

[7] Kvaraceus, William C. *Juvenile Delinquency and the School.* New York: World Book Co., 1945. p. 135.

[8] Vedder, Clyde B. *The Juvenile Offender.* New York: Doubleday and Co., 1954. p. 91.

[9] Gnagey, William J. "Do Our Schools Prevent or Promote Delinquency?" *Journal of Educational Research* 50: 215-19; November 1956.

[10] National Education Association, Research Division, *op. cit.*, p. 104-106.

VII. Instruction in Classical and Modern Foreign Languages

Some people say that the teaching of classical and modern foreign languages is disappearing from the secondary schools. They claim that 56.4 percent of all public high schools, Grades IX-XII, do not offer a course in a modern foreign language and that these schools are depriving their students of even the chance to study a foreign language. They claim further that only Spanish and French are studied by an appreciable proportion of students.[1] Bestor,[2] in support of his claim that the teaching of foreign languages has declined, cited U. S. Office of Education figures [3] to the effect that in 1900 over 73 percent of American high-school students studied a foreign language, while in 1950 only 22 percent did, and that slightly less than 14 percent of the public high-school students are currently studying a modern foreign language, while in 1900 over 21 percent were.

Public-school people agree that the programs of foreign languages now offered in a great number of secondary schools are not adequate to meet the national need and that the number of students enrolled in foreign language study has decreased in percent over the years. They disagree with the critics' interpretation of the figures, however. The U. S. Office of Education has indicated that a large number of students are taking a greater variety of languages than ever before. While the percentage of students taking a foreign language in high school in any given year is decreasing in terms of *total enrolment*, the number of students enrolled in foreign language classes as a percent of the *population* of high-school age is increasing, and, in addition, in the public elementary schools of 44 states at least 300,000 children are regularly receiving some instruction in a second language.[4]

Two factors are most pertinent to this investigation: (a) the purpose and place of modern and classical foreign languages in the public-school program and (b) current enrolment in classical and modern foreign languages.

Purpose and Place of Foreign Language Instruction

Douglass [5] stated that the most commonly cited outcomes of foreign language study are an increased knowledge of peoples of other countries, special interests in foreign peoples and countries, improved use of English, increased vocational opportunity, special interests in foreign literature and culture, and increased contacts with foreign peoples.

Notwithstanding the many objectives of foreign language instruction in the public schools, it is not uncommon that the primary objective of the student in studying a foreign language is to meet college entrance requirements. However, even this source of motivation is disappearing. Hardly a third of the colleges and universities actually now insist upon a foreign language for admission.[6] Today, except for students who are required to have two or more years of foreign languages to meet the requirements of the preparatory courses for certain colleges, foreign language courses in the public high schools are elective subjects.

Tharp expressed concern for the gap between the stated objectives of foreign language study and achievement. He claimed that the hoped-for outcomes of foreign language study have been based on the hypothesis that all students are zealous and intelligent, that teachers are properly equipped, and that the course is sufficiently long.[7]

The majority of high schools that offer a language program provide for two consecutive

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[1] Johnston, Marjorie. "Modern Foreign Languages in the High School." *School Life* 39: 8-9; June 1957.

[2] Bestor, Arthur. "We Are Less Educated than 50 Years Ago." *U. S. News and World Report*, November 30, 1956. p. 68-72, 74, 79-80, 82.

[3] U. S. Office of Education, Federal Security Agency. "Offerings and Enrollments in High-School Subjects, 1948-49." *Biennial Survey of Education in the United States: 1948-50*. Washington, D. C.: Superintendent of Documents, Government Printing Office, 1951. Chapter 5, p. 16-18.

[4] Parker, William R. *The National Interest and Foreign Languages*. Revised edition. U. S. Department of State, National Commission for UNESCO, Publication 6389. Washington, D. C.: Superintendent of Documents, Government Printing Office, January 1957. p. 8.

[5] Douglass, Harl R. *Secondary Education*. New York: Ronald Press Co., 1952. p. 349.

[6] *Ibid.*

[7] Tharp, James B. "Foreign Languages, Modern." *Encyclopedia of Educational Research*. Revised edition. (Edited by Walter S. Monroe.) New York: Macmillan Co., 1950. p. 464-85.

years of foreign language instruction, most commonly in the ninth and tenth grades. The majority of students enrolling in foreign language, study this language for two years. Only the larger high schools offer four consecutive years.

Current Status of Classical and Modern Foreign Language Offerings

The teaching of modern languages in the secondary school goes back to the colonial Latin grammar school. Altho the study of Latin and Greek was considered an essential provider of "intellectual discipline," French and German were taught to some extent.

Table 9 shows that the study of Latin reached the height of its popularity in 1900 when 50.6 percent of high-school students studied it. From 1900 on, it showed a steady decline until in 1955 only 6.9 percent of all high-school students were studying Latin.

In the modern languages, German led French in popularity until 1915. During World War I, Americans developed a distrust for all things German and for most things foreign. Twenty-two states passed laws hostile to foreign language instruction. By 1922 the percent of German language students dropped to 0.6. This phobia against foreign languages still remains under different labels, in spite of the fact that the United States is now a world power.

The study of French was most popular from 1932 to 1934. French gave way to Spanish in popularity in 1949. But the 1955 figure indicates that French is again rising in popularity —5.6 percent of high-school students were studying it. However, Spanish is still the most popular foreign language in the public high schools today; 7.3 percent of all high-school students in 1955 were enrolled in a Spanish language class.

Latin, the second most popular foreign language in the public schools, enrolled 6.9 percent of the high-school students in 1955.

Other foreign languages taught in some public high schools are Greek, Chinese, Swedish, Russian, Portuguese, Norwegian, Polish, Hebrew, and Italian. The number enrolled in such courses is small.[8]

Today more high-school students take a foreign language in any given year than in 1900 when 50.6 percent of the high-school enrolment studied Latin and 22.1 percent studied modern foreign languages; in percent of high-school-age *population* these figures were 4.3 and 1.9. In 1955, altho only 6.9 percent of the high-school enrolment studied Latin and 13.7 percent studied modern foreign languages, these figures were 4.9 and 9.8 in percent of high-school-age *population*.

[8] Parker, William R. *op. cit.*, p. 15-16.

TABLE 9.—ENROLMENTS IN LATIN AND MODERN FOREIGN LANGUAGES IN THE PUBLIC HIGH SCHOOLS, 1890-1955

Year	Total high-school enrolment	Enrolment in Latin		Enrolment in modern foreign languages		Total high-school-age population (14–17 years old)	High-school enrolment in foreign languages as a percent of the population 14–17 years of age	
		Number	Percent of high-school enrolment	Number	Percent of high-school enrolment		Latin	Modern foreign language
1	2	3	4	5	6	7	8	9
1890.....	202,963	70,428	34.7%	33,083	16.3%	5,354,653	1.3%	0.6%
1895.....	350,099	153,693	43.9	62,668	17.9	.....	...	...
1900.....	519,251	262,741	50.6	114,754	22.1	6,131,000	4.3	1.9
1905.....	679,702	341,210	50.2	199,153	29.3	6,657,000	5.1	3.0
1910.....	915,061[a]	448,380	49.0	313,866	34.3	7,254,000	6.2	4.3
1915.....	1,328,984[a]	495,711	37.3	477,105	35.9	7,620,000	6.5	6.3
1922.....	2,230,000[a]	613,250	27.5	611,020	27.4	8,261,000	7.4	7.4
1928.....	3,354,473[a]	737,984	22.0	845,327	25.2	9,216,000	8.0	9.2
1934.....	5,620,625[a]	899,300	16.0	1,096,022	19.5	9,526,000	9.4	11.5
1949.....	5,399,452	421,157	7.8	739,725	13.7	8,574,000	4.9	8.6
1955.....	6,582,300	454,179	6.9	901,775	13.7	9,242,000	4.9	9.8

Sources: Columns 2, 4, and 6 from: Parker, William Riley. *The National Interest and Foreign Languages.* Revised edition. U. S. Department of State, Commission for UNESCO, Publication 6389. Washington, D. C.: Superintendent of Documents, Government Printing Office, January 1957. p. 52-53.
Column 7 from: U. S. Department of Commerce, Bureau of the Census.
Column 3 calculated by NEA Research Division by applying column 4 to column 2.
Column 5 calculated by NEA Research Division by applying column 6 to column 2.
Columns 8 and 9 are the percents that columns 3 and 5, respectively, are of column 7.
[a] Corrected enrolment figures for all public high schools, Grades IX thru XII.

All American youth, largely irrespective of social or economic circumstances or academic capabilities, have access to 12 years of education. In 1889-90, enrolments in Grades IX-XII in the public and nonpublic schools equalled 6.7 percent of the population aged 14-17 years. In 1953-54, 80.4 percent of the population of ages 14-17 were enrolled in Grades IX-XII.[9] This development of nationwide education has had its effect on the foreign language program.

Achievement of universal education thru 12 grades of school has necessitated a continuous re-evaluation of the purposes of the public school and has resulted in an expansion of curriculum offerings. In 1940, a report of a special committee of the American Youth Commission, while recommending courses in reading, work experience, social studies, and personal problems, did not call for foreign language study.[10] In 1944, the Educational Policies Commission advocated instruction that

[9] U. S. Department of Health, Education, and Welfare, Office of Education. "Statistical Summary of Education, 1953-54." *Biennial Survey of Education in the United States: 1952-54*. Washington, D. C.: Superintendent of Documents, Government Printing Office, 1957. Chapter 1, p. 26.

[10] American Youth Commission, Special Committee on the Secondary School Curriculum. ***What the High Schools Ought To Teach***. Washington, D. C.: American Council on Education, 1940. 36 p.

TABLE 10.—PERCENT OF PUBLIC HIGH SCHOOLS OFFERING MODERN FOREIGN LANGUAGES AND SIZE OF HIGH SCHOOLS, 1954

State	Percent of high schools with modern foreign language	Modern foreign language enrolment as percent of total enrolment	Size of median high school	Percent of high schools with fewer than 100 students, 1951
1	2	3	4	5
Connecticut	100.0%	23.4%	458	2.3%
Maine	100.0	16.6	124	45.8
New Jersey	100.0	28.1	624	0.1
Rhode Island	100.0	33.4	458	11.5
California	97.6	24.0	703	6.9
Massachusetts	95.2	30.1	367	7.7
New Hampshire	94.6	19.7	173	27.9
Delaware	94.1	16.0	225	16.0
Arizona	88.3	21.8	245	20.0
Vermont	87.3	14.7	131	35.8
New York	87.1	30.2	383	10.7
Virginia	83.0	11.9	191	21.2
North Carolina	80.1	14.2	160	23.4
Maryland	75.5	15.7	396	9.1
Nevada	75.0	24.7	87	54.1
Washington	72.6	...	207	31.4
District of Columbia	70.6	21.2	964	0.0
New Mexico	66.7	22.0	134	41.0
South Carolina	64.7	9.2	143	37.6
Michigan	58.1	...	311	9.7
Wyoming	56.3	8.8	96	51.5
Illinois	54.4	...	179	22.3
Pennsylvania	54.3	14.4	387	9.3
Ohio	49.9	9.7	219	14.5
Colorado	49.1	14.0	143	36.2
Florida	45.3	10.3	208	24.6
Georgia	42.4	...	134	38.4
West Virginia	39.5	4.7	307	8.1
Texas	39.4	...	101	49.7
Oregon	38.4	6.1	175	33.5
Idaho	33.3	6.6	173	31.6
Utah	32.9	...	311	16.7
Louisiana	26.7	...	122	42.9
Tennessee	26.6	5.1	253	14.5
Indiana	24.5	5.5	161	21.7
Alabama	23.0	2.3	189	27.2
Minnesota	22.9	4.6	215	14.6
Missouri	21.8	...	127	42.5
Montana	21.3	4.7	91	52.8
Kentucky	19.5	...	188	18.0
Kansas	19.3	2.3	74	61.6
Mississippi	18.1	2.2	144	25.5
Arkansas	12.9	2.8	173	19.5
Oklahoma	10.1	3.9	90	54.1
Nebraska	9.9	4.9	63	67.4
Iowa	8.3	...	90	54.3
South Dakota	7.6	2.2	68	70.0
North Dakota	4.4	1.9	46	76.8
Wisconsin	...	5.1	203	17.7
United States	43.7	14.3	175	30.3

Source: Modern Language Association. ***The FL Program***. Report No. 2. Boston: D. C. Heath and Co., August 1955. p. 5.

would prepare youth for occupations, civic competence, and personal development. In this framework foreign languages are elective subjects.[11] In 1945, the Harvard Report recommended a core curriculum without foreign languages.[12]

More than half (56.4 percent) of all public high schools in the United States do not offer modern foreign language instruction.[13] This by no means indicates that 50 percent or more of high-school students are deprived of language instruction. Two factors enter into this figure: (a) the size of the school and (b) the state.

Every public high school in Connecticut, Maine, New Jersey, and Rhode Island offers some instruction in modern foreign languages. At the other extreme, in the Dakotas, Iowa, and Nebraska, fewer than 10 percent of the high schools offer such instruction. See Table 10.

In the states in which all public high schools offer courses in modern languages the enrolment in a median high school is relatively large, and the number of high schools with fewer than 100 students is relatively small with the exception of Maine. In contrast, in the states in which modern language courses are not widely offered, the median high school has a small enrolment, and the number of high schools with fewer than 100 students is large. This indicates that most of the 56.4 percent of schools not offering language courses are small schools with small enrolments.

Summary

The provision of educational opportunity for all American youth, with the resulting expansion of school offerings, has changed the status of foreign languages so that now foreign languages are required subjects for some students and elective subjects for all others.

A greater number and percent of the total American youth population are enrolled in both modern and classical foreign languages today than in 1900 even tho comparison of *enrolments* indicates that a larger percent of high-school students was registered in foreign language study in 1900 than in 1955.

Altho surveys show that a large number of public high schools have no language programs, these schools for the most part are small schools with small enrolments.

The emphasis on different languages taught may vary, but neither modern nor classical foreign languages have disappeared from the public schools.

[11] National Education Association and American Association of School Administrators, Educational Policies Commission. *Education for All American Youth*. Washington, D. C.: the Commission, 1944. 421 p.

[12] Harvard University, Committee on General Education in a Free Society. *General Education in a Free Society*. Cambridge, Mass.: Harvard University Press, 1945. 267 p.

[13] Parker, William R., *op. cit.*, p. 13.

VIII. Science and Mathematics in High School

Critics say that high-school students, even the bright ones, are avoiding science and mathematics; fewer students are taking these courses now than 20 or 30 years ago.

Discussion of the Charge

Those who make this charge claim that science and mathematics are taught to a shrinking proportion of students each year. In 1900, they say, 84 percent of the high-school students were taking science; today only 54 percent are. In 1900, 86 percent of the high-school students were taking mathematics; today only 55 percent are. To clinch the matter, they add that one-half of our high schools offer no courses in physics, one-quarter offer neither physics nor chemistry, and nearly one-quarter offer no geometry.[1] Science and mathematics are offered on an elective basis, and students avoid these courses and gravitate toward the easier ones.

Those who deny this charge state that figures which indicate that proportionally fewer of today's youth are being instructed in the standard subjects of mathematics and science are based on an erroneous interpretation of official statistics. The figures do not support the critics' view but, on the contrary, indicate an improvement in the situation. More high-school students are taking mathematics and science than at any other time in the history of the United

[1] Bestor, Arthur. "We Are Less Educated Than 50 Years Ago." *U. S. News and World Report*, November 30, 1956. p. 71.

States.[2] Only the smaller schools enrolling a small percentage of all high-school students omit certain courses in science and mathematics.

Two factors are examined in this section: (a) public-school offerings in science and mathematics and (b) enrolments in science and mathematics in the public schools.

Public-School Offerings in Science and Mathematics

The U. S. Office of Education, in *National Summary of Offerings and Enrollments in High-School Subjects, 1948-49,* listed 12 science courses and five mathematics courses that were taught in the last four years of high school in 15 or more states. The number and percent of students enrolled in these courses are given in Table 11.

A common grade sequence in mathematics is the offering of general mathematics and algebra in the ninth grade, plane geometry in the tenth, solid geometry in the eleventh, and trigonometry in the twelfth grade.

Grade sequences in science offerings vary, but a common sequence in general science, earth science, aeronautics, conservation, and related science in the ninth or tenth grades; biology, botany, physiology, zoology, and physical sciences in the tenth; chemistry in the eleventh; and physics in the twelfth.

The most recent U. S. Office of Education report on offerings and enrolments in science and mathematics in the public high schools[3] revealed the following facts:

1. Eighty-nine percent of all schools having tenth-grade students offered biology, usually a tenth-grade subject. The schools with no biology courses had an average tenth-grade enrolment of 27 students. The 11 percent of the public high schools with no biology courses enrolled only 3.3 percent of all tenth-grade students.

2. In the fall of 1954, 23 percent of the schools offered neither physics nor chemistry, eleventh- or twelfth-grade subjects. The average twelfth-grade enrolment in schools with neither chemistry nor physics was 17. These schools enrolled only 5.8 percent of all twelfth-grade students.

TABLE 11.—NUMBER AND PERCENT OF STUDENTS ENROLLED IN SCIENCE AND MATHEMATICS COURSES TAUGHT IN THE LAST 4 YEARS OF HIGH SCHOOL IN 15 OR MORE STATES, 1948-49 [a]

Subject	Number enrolled	Percent [b] enrolled
1	2	3
General science	1,121,980	20.8%
Biology	995,930	18.4
Botany	7,670	0.1
Physiology	53,592	1.0
Zoology	5,051	0.1
Earth science	20,575	0.4
Aeronautics	14,959	0.3
Physical science	7,006	0.1
Chemistry	412,401	7.6
Physics	291,473	5.4
Conservation	3,546	0.1
Related science	7,332	0.1
Algebra	1,448,966	26.8
General mathematics	704,742	13.1
Plane geometry	599,336	11.1
Solid geometry	93,944	1.7
Trigonometry	108,551	2.0

Source: Rice, Mabel C. *National Summary of Offerings and Enrollments in High-School Subjects, 1948-49.* Federal Security Agency, Office of Education, Statistical Circular No. 294. Washington, D. C.: Superintendent of Documents, Government Printing Office, May 1951. p. 4.

[a] The enrolments in all levels of a subject (elementary, applied, or advanced) have been combined with the enrolment in the basic subject.

[b] Based on total enrolment of 5,399,452 in the last 4 years in public secondary day schools in the United States.

3. General mathematics, usually taught in the ninth grade, was offered by 70.8 percent of the schools. Elementary algebra was offered by 89.8 percent of all high schools. Plane geometry, generally taught in the tenth grade, was offered by 78 percent of all high schools with a tenth grade. The schools that did not offer plane geometry enrolled only 6.8 percent of all tenth-grade students. About half of all the high schools offered solid geometry and trigonometry; about one-third did not offer trigonometry, solid geometry, or intermediate algebra, courses normally offered in the twelfth grade. These schools enrolled only about one-tenth of all students in the twelfth grade.

Enrolment in Science Courses

Table 12 shows the percent of students enrolled in certain subjects in science in the last four years of the public high schools on the basis of total school enrolment in several different years from 1889-90 thru 1956-57. The

[2] Hand, Harold C. "Black Horses Eat More Than White Horses." *Bulletin of the American Association of University Professors* 43: 266-79; Summer 1957.

[3] Brown, Kenneth E. *Offerings and Enrollments in Science and Mathematics in Public High Schools.* U. S. Department of Health, Education, and Welfare, Office of Education, Pamphlet No. 118. Washington, D. C.: Superintendent of Documents, Government Printing Office, 1956. p. 5.

figures show a steady decline in percent of secondary-school students enrolled who were taking physics, earth science, zoology, physiology, and botany. The percent of students enrolled in chemistry remained about the same. There is a steady increase in biology (at the expense of botany, physiology, zoology, and earth science) and in general science.

These figures by subject are *one year* figures, based on the total enrolment for that year. A high-school student is unlikely to be enrolled in more than one course in science in any one year. A more meaningful report would have based the percent of enrolment in each subject on the *total enrolment of the grade* in which the particular subject is offered. Since the basic figures for such a breakdown by years are lacking, column 11 is included in the table. It shows an approximate total enrolment in these eight subjects in each of the years listed. On this basis a substantial increase is shown from the 33.9 percent enrolled in science in 1900 to the 54.3 percent of 1956-57.

In 1956, Brown reported the percent of students enrolled in biology, chemistry, and physics in terms of the total grade enrolments in which the courses are offered. He found that the enrolment in biology equaled 72.6 percent of the number of students in the tenth grade; the enrolment in chemistry equaled 31.9 percent of the number of students in the eleventh grade; and the enrolment in physics equaled 23.5 percent of the number of students in the twelfth grade.[4] When computed as percents of total enrolments (as in Table 12), Brown's figures showed 19.6 percent taking biology; 7.3 percent, chemistry; and 4.6 percent, physics.

For obvious reasons the figures covering a 50-year span cannot be used for *comparative purposes* without qualification. For example, the total enrolment for 1900 represented only 6.7 percent of the youth 14 thru 17 years of age, while the total enrolment figure for 1954 represented 80.4 percent of the total high-school-age population. In addition, the subject content, the method, and time spent on the subject have changed in the last 54 years.

The *decline in percentages* in certain subjects as reported in Table 12 should not be interpreted as a decline in actual numbers. For example, the percent of pupils enrolled in physics has declined since 1900, but in 1900 the number enrolled in physics was 98,846 while the number enrolled increased to 302,800 in 1954. The 1900 total taking physics represents 1.6 percent of the youth 14-17 years of age; the 1954 total, 3.3 percent of the youth 14-17 years old. Since some small high schools offer certain subjects only in alternate years, students taking physics in Grade XI or students taking chemistry in Grade XII are probably not included.

Enrolments in Mathematics Courses

Table 13 shows the percent of students enrolled in mathematics based on total high-school enrolment in the last four years of public secondary schools. The percent of students en-

[4] *Ibid.*, p. 9.

TABLE 12.—PERCENT OF STUDENTS ENROLLED IN SCIENCE COURSES IN THE LAST 4 YEARS OF PUBLIC SECONDARY DAY SCHOOLS, 1889-90 THRU 1954-55

Year	Total enrolment	General science	Biology	Botany	Physiology	Zoology	Earth science	Chemistry	Physics	Total
1	2	3	4	5	6	7	8	9	10	11
1890.....	202,963	...	...	...	...	...	...	10.1%	22.8%	33.9%
1900.....	519,251	...	...	...	27.4%	...	29.8%	7.7	19.0	83.9
1910.....	739,143	...	1.1%	15.8%	15.3	6.9%	21.0	6.9	14.6	81.6
1915.....	1,165,495	...	6.9	9.1	9.5	3.2	15.3	7.4	14.2	65.3
1922.....	2,155,460	18.3%	8.8	3.8	5.1	1.5	4.5	7.4	8.9	58.3
1928.....	2,896,630	17.5	13.6	1.6	2.7	0.8	2.8	7.1	6.8	52.9
1934.....	4,496,514	17.8	14.6	0.9	1.8	0.6	1.7	7.6	6.3	51.3
1949.....	5,399,452	20.8	18.4	0.1	1.0	0.1	0.4	7.6	5.4	53.8
1954.....	6,262,975	...	19.6	...	...	...	...	7.3	4.6	...
1956-57...	6,963,000	21.8	20.5	...	...	...	...	7.5	4.5	54.3

Sources: U. S. Office of Education, Federal Security Agency. "Offerings and Enrollments in High-School Subjects." *Biennial Survey of Education in the United States: 1948-50.* Washington, D. C.: Superintendent of Documents, Government Printing Office, 1951. Chapter 5, p. 107.

Brown, Kenneth E. *Offerings and Enrollments in Science and Mathematics in Public High Schools.* U. S. Department of Health, Education, and Welfare, Office of Education, Pamphlet No. 118. Washington, D. C.: Superintendent of Documents, Government Printing Office, 1956. p. 8.

U. S. Department of Health, Education, and Welfare, Office of Education. "Education in the USSR." *School Life* 40: 7; December 1957.

TABLE 13.—PERCENT OF STUDENTS ENROLLED IN MATHEMATICS COURSES IN THE LAST 4 YEARS OF PUBLIC SECONDARY DAY SCHOOLS, 1889-90 THRU 1945-55

Year	Total enrolment	Algebra	General Mathematics	Geometry	Trigonometry	Total
1	2	3	4	5	6	7
1890	202,963	45.4%	...	21.3%	...	66.7%
1900	519,251	56.3	...	27.4	1.9%	85.6
1910	739,143	56.9	...	30.9	1.9	89.7
1915	1,165,495	48.8	...	26.5	1.5	76.8
1922	2,155,460	40.2	12.4%	22.7	1.5	76.8
1928	2,896,630	35.2	7.9	19.8	1.3	64.2
1934	4,496,514	30.4	7.4	17.1	1.3	56.2
1949	5,399,452	26.8	13.1	12.8	2.0	54.7
1952–53	5,855,087	24.6	15.0	11.6	1.7	52.9
1954–55	6,262,975	24.8	...	11.4	2.6	...
1956–57	6,963,000	28.8	14.0	13.6	2.9	59.3

Sources: U. S. Office of Education, Federal Security Agency. "Offerings and Enrollments in High-School Subjects." *Biennial Survey of Education in the United States: 1948-50.* Washington, D. C.: Superintendent of Documents, Government Printing Office, 1951. Chapter 5, p. 107.

U. S. Department of Health, Education, and Welfare, Office of Education. *Mathematics in Public High Schools.* Bulletin 1953, No. 5. Washington, D. C.: Superintendent of Documents, Government Printing Office, 1953. p. 34.

Brown, Kenneth E. "National Enrollments in High School Mathematics." *Mathematics Teacher* 49: 366-67; May 1956.

U. S. Department of Health, Education, and Welfare, Office of Education. "Education in the USSR." *School Life* 40: 7; December 1957.

rolled in geometry and algebra decreased, and the percent enrolled in general mathematics and trigonometry increased.

The actual numbers of students enrolled in all these mathematics courses have increased steadily.[5]

The U. S. Office of Education reported that in 1956-57 general mathematics enrolled 43.1 percent of the students in the ninth grade; elementary algebra, 67.0 percent of the students in the ninth grade; plane geometry, 41.6 percent of the students in the tenth grade; intermediate algebra, 32.2 percent of the students in the eleventh grade; trigonometry, 9.2 percent of the students in the twelfth grade; and solid geometry, 7.6 percent of the students in the twelfth grade.[6]

In 1957, Hand [7] published a report showing the percentage of enrolment in science and mathematics in 1949-50 based on different criteria. He stated that if the percentage of enrolment in science and mathematics is based on the total enrolment of the high schools in any one year of survey, the percents are:

Subject	*1900*	*1950*	*Ratio in favor of 1900*
Mathematics	86%	55%	1½ to 1
Science	84	54	1½ to 1

On the other hand, if the percentage of enrolment is based on high-school-age population (ages 14 thru 17), the percents are:

Subject	*1900*	*1950*	*Ratio in favor of 1950*
Mathematics	7%	35%	5 to 1
Science	7	35	5 to 1

When one bases the increase on the total number of students enrolled, the percentage reads:

Subject	*Enrolment*		*Increase from*
	1900	*1950*	*1900 to 1950*
Geometry	142,235	693,280	387%
Chemistry	40,084	412,401	929
Physics ..	98,846	291,473	195

Summary

The majority of public schools offer a full program in mathematics and science. The schools that lack a major course in these subjects are the *small* schools with *small* enrolments. Leaders in school administration for years have been urging state legislatures to establish large school districts in order to discourage the maintenance of high schools so small that they cannot provide an adequate curriculum for their students. A lack of

[5] *Ibid.*, p. 17.

[6] U. S. Department of Health, Education, and Welfare, Office of Education. "Education in the USSR." *School Life* 40: 7; December 1957.

[7] Hand, Harold C., *op. cit.*, p. 272 and 276.

teachers, funds, and equipment makes it impossible for many of these schools to offer a full program of science and mathematics.

The percentage of enrolment in science and mathematics classes is increasing or decreasing according to the basis of calculation. It seems unmistakably clear, however, that substantially higher percentages of young people aged 14-17 are studying science and mathematics today than were doing so 50 years ago.

IX. The Education of Gifted Children

Critics say that the public schools are neglecting the gifted children because they are geared to teach the average child.

Discussion of the Charge

The proponents of this charge claim that the gifted children—the potential leaders, discoverers, and creators—are usually left to develop their own skills in their own way and on their own initiative alone. The gifted child needs stimulating and challenging experiences which he rarely receives in the large classes of most elementary schools today. In fact, in many cases his unusual ability is not even recognized. One critic in particular charges that the educators consider it undemocratic to honor and reward students for outstanding academic achievement. Other persons claim that the neglect of the gifted children is acknowledged by many school people but that little is being done to alter the situation.[1]

Some public-school teachers claim that there is no problem with which educators are more universally concerned than that of the neglect of the gifted child. In 1955, Havighurst and others summarized 63 school programs for the gifted. Connecticut outlined a statewide program for special education of the gifted. The Major Work Program for gifted children in the Cleveland schools began more than 30 years ago. There are also major programs in Long Beach, California; Pittsburgh, Pennsylvania; St. Paul, Minnesota [2]; and many other large and small school systems.

Three factors are considered in this investigation: (a) the definition of *gifted child,* (b) summary of research conducted on the gifted child, and (c) the present status of school programs for the gifted child.

Definition of *Gifted Child*

In 1916 Terman set the lower limit for the gifted group as an IQ of 110 on the Stanford Revision of the *Binet-Simon Intelligence Scale.*[3] When the revised scales appeared in 1937, only those children having IQ's of at least 120 (the highest 12.6 percent of an unselected group) were classed as superior, and only those with IQ's of 140 or higher (the highest 1 percent) were classed as very superior.[4]

Norris and Danielson included children with IQ's of 125 and above in grouping superior children in Major Work Classes.[5] Goddard employed an IQ of 120 as the lower limit in forming classes for gifted children.[6]

Others included among the gifted those children with special artistic and mechanical talents, and those who excel in creative thinking and abstract reasoning.[7]

Identification of the Gifted Child

In the studies of gifted children and in the special schools of some communities that provide for their education, IQ level and the teacher's judgment are the chief criteria for identification; these should be examined.

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[1] Witty, Paul. "Educational Provision for Gifted Children." *School and Society* 76: 177-81; September 20, 1952.
Miles, C. C. *Manual of Child Psychology.* (Edited by Leonard Carmichael.) New York: John Wiley and Sons, 1946. p. 931.

[2] Kearney, Nolan C. "Educating the Gifted Child." *New Republic,* March 25, 1957. p. 13-15.

[3] Terman, Lewis M. *The Measurement of Intelligence.* Boston: Houghton Mifflin Co., 1916. p. 78-79.

[4] Merrill, Maud A. "The Significance of IQ's on the Revised Stanford-Binet Scales." *Journal of Educational Psychology* 29: 641-51; December 1938.

[5] Norris, Dorothy E. "The Program for Gifted Children in Cleveland." *Addresses and Proceedings.* Washington, D. C.: National Education Association, 1940. p. 639-40.
Danielson, Cora L. "Special Classes for Superior Children in a Far-Western City." *Meeting Special Needs of the Individual Child.* Nineteenth Yearbook. Washington, D. C.: National Education Association, Department of Elementary School Principals, 1940. p. 388-96.

[6] Goddard, Henry H. *School Training of Gifted Children.* Yonkers-on-Hudson: World Book Co., 1928. 226 p.

[7] Osburn, W. J., and Rohan, Ben J. *Enriching the Curriculum for Gifted Children.* New York: Macmillan Co., 1931. 408 p.
Carroll, Herbert A. "Intellectually Gifted Children: Their Characteristics and Problems." *Teachers College Record* 42: 212-27; December 1940.

The unreliability of teachers' judgments as a method for identifying gifted children was studied by Carroll. He found that only 15.7 percent of the children nominated by 6000 teachers (each child as the most intelligent in his class) were found to be qualified for the gifted group.[8] Likewise, the report issued in 1950 by the Educational Policies Commission on the education of the gifted indicates the unreliability of teachers' judgments in the selection of gifted children.[9]

Identification by intelligence test is also questionable. If a promise of creativity is the characteristic of a gifted child, the most commonly used intelligence tests are poorly designed to identify such characteristics, for creativity implies originality, and originality implies successful management, control, and organization of new materials or experiences. The contents of most intelligence tests lack situations which disclose originality or creativity.[10]

Hollingworth, on the other hand, regarded individual intelligence tests as the most important single tool for identification of the gifted.[11]

Stenquist, Thorndike, and Weglein viewed intelligence tests as but one means of selection, suggesting teacher's judgment, achievement tests, school records, measures of special abilities, and physical and social maturity data as desirable supplementary evidence.[12]

Mental traits of a gifted child—All investigators concede that gifted children possess high mental ability, but agreement is lacking in regard to the mental traits involved. A positive correlation between high intelligence and desirable traits was found by Terman and others.[13]

Pintner, Thorndike, and Simmons showed that individuals of high intelligence are less easy to influence, slower to adopt opinions and more tenacious of opinion once formed, and less susceptible to influence or suggestion.[14]

Physical traits—Hollingworth[15] and Terman[16] found the gifted child generally larger and stronger than the unselected. Mentally superior children as a group are somewhat above the average in height and weight for their ages. Altho they are also likely to be somewhat stronger and healthier than average children, they need encouragement in physical activity. Often the gifted child is superior in physical beauty.

Social traits of a gifted child—Carroll[17] showed that a gifted child of nine years equaled an average child of 14 years in character development. The gifted are named as leaders more often than chance would allow. On the other hand, a superior child is not always a leader and not always well liked by other children.

A child's liking another child tends to decrease as the difference between mental levels increases.[18] Gifted children definitely tend to prefer older companions or those somewhat

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[8] Carroll, Herbert A. *Genius in the Making*. New York: McGraw-Hill Book Co., 1940. p. 9.

[9] National Education Association and American Association of School Administrators, Educational Policies Commission. *Education of the Gifted*. Washington, D. C.: the Commission, June 1950. p. 35-37.

[10] Witty, Paul. "Contributions to the IQ Controversy from the Study of Superior Deviates." *School and Society* 51: 504; April 20, 1940.

[11] Pritchard, Miriam C. "The Contributions of Leta S. Hollingworth to the Study of Gifted Children." *The Gifted Child*. (Edited by Paul Witty.) American Association for Gifted Children. Boston: D. C. Heath and Co., 1951. p. 50.

[12] Stenquist, John L. "Baltimore's Plan for Superior Pupils." *Nation's Schools* 28: 20-22; October 1941.
Thorndike, Robert L. "Problems in Identification, Description, and Development of the Gifted." *Teachers College Record* 42: 402-406; February 1941.
Weglein, David E. "Administrative Problems in the Education of the Gifted." *Teachers College Record* 42: 428-31; February 1941.

[13] Terman, Lewis M., and others. *Mental and Physical Traits of a Thousand Gifted Children*. Genetic Studies of Genius, Vol. I. Stanford, Calif.: Stanford University Press, 1925. 648 p.

[14] Pintner, Rudolf. "Superior Ability." *Teachers College Record* 42: 407-19; February 1941.
Thorndike, Robert L., *op. cit.*
Simmons, Rachel M. *A Study of a Group of Children of Exceptionally High Intelligence Quotient in Situations Partaking of the Nature of Suggestion*. Contributions to Education, No. 788. New York: Teachers College, Columbia University, 1940. 112 p.

[15] Hollingworth, Leta S. *Gifted Children: Their Nature and Nurture*. New York: Macmillan Co., 1926. 374 p.

[16] Terman, Lewis M., and others, *op. cit.*

[17] Carroll, H. A. "Intellectually Gifted Children: Their Characteristics and Problems." *Teachers College Record* 42: 212-27; December 1940.

[18] Blair, Glenn M. *Mentally Superior and Inferior Children in the Junior and Senior High School*. Contributions to Education, No. 766. New York: Teachers College, Columbia University, 1938. 87 p.

equal to themselves in mental age.[19] However, Hollingworth, and Martens and others[20] pointed out that the gifted youth is often socially immature and, therefore, shy with the older group whose mental pursuits interest him. Exceptions are found in extremely intelligent children—those with IQ's above 170—who are usually misunderstood and mistrusted by ordinary youngsters.

Emotional traits of a gifted child—Lewis' study [21] of superior children in the elementary school, Terman's genetic study of genius, Holingworth's research, Witty's study of 100 gifted children,[22] and other investigations all present evidence that gifted children are equal or superior to the general population in degree of emotional maturity, absence of behavior problems, and ability to adapt to conditions that they cannot change.

School Programs for the Gifted Children

Special education for gifted children is as old as recorded history, as is illustrated in the Bible story of Daniel and his friends who were taken to Babylon because King Nebuchadnezzar wanted children "skilful in all wisdom, and cunning in knowledge, and understanding science" to be educated in Babylon.

The latest available figures (1952-53) from the U. S. Office of Education show that the enrolments of gifted children in special schools and classes in public schools were 3683 in elementary schools (less than 1 percent of the total enrolled in special schools and classes) and 19,233 in secondary schools (about 18 percent of the total enrolled in special schools and classes). While total public-school enrolment increased 17.4 percent from 1947-48 to 1952-53, enrolment of gifted children in special schools and classes increased 10.6 percent. Furthermore, on the elementary-school level. the 1952-53 enrolment of mentally retarded children in special schools and classes was 23 times as great as the enrolment of mentally gifted children in special schools and classes. On the secondary-school level, enrolment in schools and classes for the mentally retarded was 15 times as great as the enrolment of gifted children in special schools and classes.[23]

In 1956 Scheppy [24] requested from each of the 48 states and the District of Columbia information on plans for the education of gifted children and sent a similar inquiry to 285 cities of 40,000 or more population, including the capital city of each state. Only two states, Kansas and Oregon, reported state-level programs of special education for gifted children. Most of the states, tho aware of the need for such programs, left responsibility for the matter to local school districts. In general, state suggestions to local districts tended to encourage enrichment and broadening of the regular school program rather than acceleration or segregation of gifted students.

Only one state, Montana, reported existing legislation concerning a program for gifted children, but the law has been inoperative because of a lack of funds. State appropriations are as nonexistent as state programs. California has requested a legislative appropriation of $150,000 to be used in establishing pilot programs for the special education of gifted children and to make evaluative studies of present school programs being operated by different school districts.

Of the 147 cities responding to Scheppy's inquiry, 78 reported some type of definite program in operation; 44 had a plan in mind or were formulating a program; and 25 reported no special program and no plans for one.

In 1940 the NEA Research Division made a survey of the opinions of principals and of the practices of junior and senior high schools with respect to the education of gifted students.[25]

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[19] Hollingworth, Leta S., *op. cit.*

[20] Martens, Elise H., and others. *Teachers' Problems with Exceptional Children: II. Gifted Children.* U. S. Department of the Interior, Office of Education, Pamphlet No. 41. Washington, D. C.: Superintendent of Documents, Government Printing Office, 1933. 45 p.

[21] Lewis, William D. *A Study of Superior Children in the Elementary School.* Contributions to Education, No. 266. Nashville, Tenn.: George Peabody College for Teachers, 1940. 104 p.

[22] Witty, Paul A. *A Study of One Hundred Gifted Children.* University of Kansas Bulletin of Education, Vol. II, No. 7. Lawrence: University of Kansas, 1930.

[23] U. S. Department of Health, Education, and Welfare, Office of Education. "Statistics of Special Education for Exceptional Children, 1952-53." *Biennial Survey of Education in the United States: 1952-54.* Washington, D. C.: Superintendent of Documents, Government Printing Office, 1954. p. 11 and 14.

[24] Scheppy, Betty V. *A Survey of the Education of the Gifted Child in the United States.* Master's thesis. New Haven, Conn.: New Haven State Teachers' College, 1956. 161 p. (Typewritten)

[25] National Education Association, Research Division. "High-School Methods with Superior Students." *Research Bulletin* 19: 153-200; September 1941.

The following are some of the findings of the survey: (a) All principals believed that provisions for superior students should differ in some respects from those for students of average ability. (b) Nearly all believed that the superior students should be given an enriched program either in separate or regular classes, and more than 8 in 10 believed that students with special ability in a certain field should be given a curriculum more heavily weighted with courses in that field. (c) About half believed that students of superior ability need teachers whose qualifications differ from those considered adequate for teachers of average students. The survey of practice showed that about three-fourths of the schools made some special provision for superior students. Of senior high schools, 36 percent provided separate classes, and 16 percent provided special curriculums, involving a variety of subjects and extending thru several years.

Teacher personnel in the education of gifted children—A nationwide survey of special education personnel in state and local school systems and in colleges concerning the availability of teachers of exceptional children indicate that teachers of gifted children were in less demand than were teachers who taught nine other types of exceptional children.[26] Demand for teachers for the mentally retarded ranked first.

Only Pennsylvania was found to have a special certificate for teachers of the gifted, altho several other states had classes for these children and attempted to select teachers considered qualified to teach them.

The study concluded that there are two reasons for the lack of widespread special certification for teachers of the mentally gifted: There are relatively few classes for such children, and there is a lack of agreement on the distinctive competencies needed by teachers of the gifted.

The study found only two centers in the United States that offered complete sequences in the preparation of teachers for mentally gifted children: Hunter College of the City of New York and Pennsylvania State University.[27]

Enrichment and acceleration—In the elementary-school grades, acceleration is frequently accomplished by extra promotion or by sectioning to form rapidly moving classes. In the secondary school, acceleration is often accomplished thru permitting the brighter students to take more than the usual number of subjects, thus resulting in graduation from a four-year course in three years. Another method for acceleration in high schools is the advanced placement plan by which accelerated students take college freshman subjects while still in high school, and upon completion, are admitted to the sophomore class at a number of colleges and universities.

According to Hollingworth, while the dangers of acceleration may sometimes have been overdrawn, its effect on the personality of the child cannot be ignored.[28] On the other hand, Freeman[29] defended acceleration as a general educational policy and contended that social difficulties caused by acceleration can be met by proper forms of school organization. The child of extremely high IQ is a mental misfit with his age mates and may be a social misfit with his intellectual peers. Problems of personal adjustment are inevitable for him.

Terman believed that if the gifted child's intellectual welfare were the sole criterion, promotion ought to be based primarily on mental age. The studies he reviewed indicated that the risk of maladjustment is less than is commonly believed.[30] He concluded that no rule can be made on how much acceleration is desirable because many other factors also have a bearing. Children with an IQ of 135 or higher should be accelerated so as to enter college by the age of 17, or even 16, according to Terman.[31]

However, these convictions are not shared by the majority of school administrators. In a survey made in 1940 by the NEA Research

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[26] U. S. Department of Health, Education, and Welfare, Office of Education. *College and University Programs for the Preparation of Teachers of Exceptional Children*. Bulletin 1954, No. 13. Washington, D. C.: Superintendent of Documents, Government Printing Office, 1954. 91 p.

[27] *Ibid.*, p. 35.

[28] Hollingworth, Leta S., *op. cit.*

[29] Freeman, Frank N. "The Treatment of the Gifted Child in the Light of the Scientific Evidence." *Elementary School Journal* 24: 652-61; May 1924.

[30] Terman, Lewis M., and Oden, Melita H. *The Gifted Child Grows Up*. Genetic Studies of Genius, Vol. 4. Stanford, Calif.: Stanford University Press, 1947. p. 279-80.

[31] *Ibid.*, p. 281.

Division only 12 to 15 percent of the junior and senior high-school principals believed that students of superior ability should complete the curriculum in less time than the average.[32]

Worcester believed that acceleration should be practiced in the early grades.[33] Others have expressed the opinion that the social and emotional problems created by acceleration in school are likely to be more serious before the onset of adolescence than later.[34]

Enrichment of the curriculum has been proposed as a means of avoiding the undesirable effects attributed to acceleration. In advocating enrichment, Norris,[35] Martens and others,[36] Brumbaugh,[37] and Hollingworth[38] expressed the opinion that such enrichment results in more and better work in regular subjects and a broader basis of education thru acquaintance with related materials and experiences beyond the confines of the classroom. Altho the evidence is inadequate, several studies indicate the superiority of enrichment over acceleration.[39]

Separate classes and electives—Attempts are being made to facilitate acceleration and enrichment by assigning superior students to separate classes. The students in such classes may progress more rapidly thru the basic curriculum without being placed with older and socially more mature students. Also, it is easier to enrich the program for bright students even tho their individual needs vary. On the other hand, there are several objections to such a program: (a) Some abilities and many personality traits are little correlated with abstract intelligence. (b) Classification on the basis of ability is artificial and not akin to grouping by common purposes occurring among adults. (c) Educational tests seldom show higher achievement scores for students in special classes than for other students of like ability. However, ability grouping should not excuse the teacher from taking account of individual differences among the students. In a special class bright children for the first time encounter real competition, which tends to reduce conceit rather than to increase it. (c) Several studies reported by Lillett[40] have shown that certain groups of students in special classes achieve superior performance when adequately appraised.

A common administrative means of providing for individual differences is that of offering a variety of elective subjects in addition to those which every student must take. Some of these electives call for superior general mental ability, and others are designed for students with unusual aptitudes.

Summary

The abundance of educational research and the amount of literature in both lay and professional magazines indicate a general concern for the education of the gifted child. Many public schools have shown genuine concern for special education for the gifted. The recent international crisis has accelerated concern for human resources and emphasized a need for early identification, training, and utilization of gifted minds.

The validity of the most common methods used in the identification of the superior child —intelligence tests and teacher judgment— have been challenged; improvements are being sought. Some investigators suggest that achievement tests, school records, measures of special abilities, and physical and social maturity data be used as evidence in the identification of the gifted child.

[32] National Education Association, Research Division, *op. cit.*, p. 163.

[33] Worcester, Dean A. *The Education of Children of Above-Average Mentality.* Lincoln: University of Nebraska Press, 1956. p. 35.

[34] Hollingworth, Leta S., *op. cit.*, p. 298-300.

[35] Norris, Dorothy E. "Special Classes for Superior Children in an Eastern City." *Meeting Special Needs of the Individual Child.* Nineteenth Yearbook. Washington, D. C.: Department of Elementary School Principals, National Education Association, 1940. p. 397-406.

[36] Martens, Elise H., and others, *op. cit.*

[37] Brumbaugh, Florence. "Gifted Pupils and Parents Use the Community as a Laboratory for Learning." *Community Living and the Elementary School.* Twenty-Fourth Yearbook. Washington, D. C.: Department of Elementary School Principals, National Education Association, 1945. p. 29-32.

[38] Hollingworth, Leta S., *op. cit.*

[39] Wolfson, Sarah. "James Monroe High School Organizes an Honor School: The Founding of a Tradition." *High Points* 19: 34-42; September 1937.
White House Conference on Child Health and Protection. *Special Education: The Handicapped and the Gifted.* New York: Century Co., 1931. p. 537-50.

[40] Billett, Roy O. *Provisions for Individual Differences, Marking, and Promotion.* U. S. Department of the Interior, Office of Education, Bulletin 1932, No. 17, National Survey of Secondary Education Monograph No. 13. Washington, D. C.: Superintendent of Documents, Government Printing Office, 1933. p. 27-37.

Educational plans for the gifted child are almost nonexistent on the state level. There are practically no programs for training and certifying teachers of gifted children.

Informal classroom recognition and planning for the teaching of the gifted child are a part of many local school programs; systematic schoolwide programs are not as prevalent. Enrichment, electives, and acceleration are a part of many public high-school programs; some schools place the gifted children in separate classes; major programs for the gifted are operating in several large city school systems.

Evidence indicates that even tho progress is being made, much more could and should be done to develop the gifted to full potential.

X. Moral and Spiritual Values

Some people claim that the public schools are neglecting the training of children in moral and spiritual values.

Discussion of the Charge

Those who make this charge are convinced that the moral and spiritual condition of our young people is bad and insist that matters be set right. They recognize that the conditions which they deplore have been due in part to the shortcomings of parents and church and a lack of agreement as to what constitutes morality, but they accuse the schools of refusing to bear their share of responsibility.

Those who deny this charge claim that the public schools have always helped to transmit moral and spiritual values. School people are surprised that anyone should think that only denominational schools are concerned with matters of morality and spirit. They are disappointed to hear civic leaders suggest—as tho it were a new idea—that classroom teachers be as much interested and concerned with the character of their pupils as with their literacy. The schools have always worked at developing in children a sense of honesty, integrity, and loyalty to our society.[1]

Two important factors are pertinent: (a) definition and status of moral and spiritual values of our school-age population and (b) public-school programs for moral and spiritual values.

Status of Moral and Spiritual Values

Moral values may be defined as the traits and attitudes which bring about socially accepted behavior.

Spiritual values include the high mystical experiences of organized religious groups—a realm in which the public schools cannot operate. Spiritual values also include appreciation of the place of religion in human life, and the ethical, esthetic, and emotional experiences that help to elevate and liberate the human spirit. This is the realm in which the public schools can participate.[2]

An NEA discussion group reporting in 1948 stated that spiritual values include (a) unification of society, (b) worth of the individual, (c) personality and ethical character, (d) cooperative spirit, (e) community life, (f) truth, (g) reverence and awe, (h) love for the beautiful, (i) hatred for wrong, and (j) recognition of the greatest force in life—the power of God.[3] The Seventh Yearbook of the John Dewey Society gives a similar definition of spiritual values.[4]

Juvenile delinquency, which might be considered as resulting from a lack of proper moral values, was discussed elsewhere in this study. Altho the number of cases of juvenile delinquency is on the increase, it is below 2 percent of the juvenile population. A survey of classroom teachers' opinions on behavior of pupils in the classroom indicated that the real "behavior problems" were less than 1 percent of the students enrolled.

Table 14 lists the 16 "worst practices" rated by teen-agers in 1954 compared with those listed by a similar group of teen-agers in 1919. Practices listed in 1919 but not listed in 1954 are gambling, idleness, extravagance, and dancing. Practices listed in 1954 but not listed in 1919 are using or selling narcotics, being

[1] Conant, James B. *Baccalaureate Sermon Delivered by President James B. Conant to the Harvard College Class of 1950.* Cambridge: Harvard University, 1950. p. 4-5.

[2] National Education Association, Department of Elementary School Principals. *Spiritual Values in the Elementary School.* Twenty-Sixth Yearbook. Washington, D. C.: the Department, 1947. 351 p.

[3] National Education Association. *Proceedings, 1948.* Washington, D. C.: the Association, 1948. p. 169-70.

[4] Brubacher, John S., editor. *The Public Schools and Spiritual Values.* Seventh Yearbook of the John Dewey Society. New York: Harper and Brothers, 1944. 222 p.

TABLE 14.—STUDENT RANKINGS OF WORST PRACTICES 1919 AND 1954

Rank	1919	1954
1	2	3
1.....	Killing or murdering	Killing or murdering
2.....	Sexual misbehaving	Using or selling narcotics
3.....	Stealing	Sexual misbehaving
4.....	Cheating	Stealing
5.....	Lying	Drinking
6.....	Drinking	Cheating
7.....	Gambling	Lying
8.....	Swearing, vulgar talk	Being cruel
9.....	Not being religious	Not being religious
10.....	Being selfish	Reckless driving
11.....	Gossiping	Swearing
12.....	Idleness	Being undependable
13.....	Snobbishness	Gossiping
14.....	Extravagance	Being inconsiderate
15.....	Smoking	Smoking
16.....	Dancing	Being conceited

From THE AMERICAN TEENAGER, by H. H. Remmers and D. H. Radler, copyright 1957, used by special permission of the publisher, The Bobbs-Merrill Company, Inc.

cruel, reckless driving, and being undependable.

Public-School Programs for the Development of Moral and Spiritual Values

In the early days of the public schools, studying the Bible was the chief means of developing moral character. Altho the school curriculum has changed since those days, character education has continued to be fundamental in the public schools.

The National Education Association's 1954 resolution on moral and spiritual values states that the Association

> recognizes the necessity for a clear understanding of fundamental moral and spiritual values. The Association believes that along with the home, the church, and the community, the school has a major responsibility for building this understanding into human behavior.
>
> The Association recommends that teacher-education institutions and inservice programs stress consistently the methods thru which these values may be developed and urges continuing research to increase effectiveness of instruction in moral and spiritual values.[5]

In 1951, the Educational Policies Commission published a statement to clarify the position of the public schools in teaching moral and spiritual values and discussed 10 values, recommending methods for improving the teaching of them: (a) human personality—the basic value, (b) moral responsibility, (c) institutions as the servants of men, (d) common consent, (e) devotion to truth, (f) respect for excellence, (g) moral equality, (h) brotherhood, (i) pursuit of happiness, and (j) spiritual enrichment.[6]

Large city school districts and state departments of education have published curriculum guides for teaching moral and spiritual values.[7] School assemblies, the guidance program, student government, and co-curriculum activities are the major schoolwide ways for achieving the stated goals. In all schools, including those where no systematic program has been developed, these values are also an integral part of the aims of many classroom activities.

Attempts to evaluate direct instruction for moral and spiritual values usually reveal small gains on a short-run basis, but information on long-run results is lacking. Jones conducted a year-long experiment in eight upper-grade groups. Two classes were taught by an experience method without discussion of principles, two were taught by a discussion method without other experience, two combined experience and discussion, and two were used as control groups. The children in all groups were measured at the beginning and at the end of the period by means of an extensive battery of tests of actual conduct. While the differences between the gains toward improved conduct of the experimental groups and the gains of the control groups were small in all cases, those of the experience-plus-discussion groups were most consistent.[8]

Religious Education in the Public Schools

The First Amendment to the Constitution of the United States reads in part: "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof." This is our guarantee of religious liberty. But state constitutions and statutes and their interpretations are not uniform in

[5] National Education Association. *Proceedings, 1954.* Washington, D. C.: the Association, 1954. p. 125.

[6] National Education Association and American Association of School Administrators, Educational Policies Commission. *Moral and Spiritual Values in the Public Schools.* Washington, D. C.: the Commission, 1951. 100 p.

[7] Columbus Public Schools. *Values To Live By.* 1953-54 Annual Report of the Superintendent. Columbus, Ohio: Board of Education, 1954. 40 p.

Fresno City Unified School District. *We Live by Values.* Fresno, Calif.: Board of Education, 1957. 40 p.

Akron Public Schools. *Moral and Spiritual Values.* Akron, Ohio: Board of Education, 1953. 21 p.

Los Angeles City Schools. *Moral and Spiritual Values in Education.* Publication No. 580. Los Angeles: Board of Education, 1954. 122 p.

[8] Jones, Vernon. *Character and Citizenship Training in the Public School.* Chicago: University of Chicago Press, 1936. 404 p.

their treatment of this important principle, particularly in regard to points where the education sponsored by some religious sects comes into contact with public educaton.[9]

Most public schools are prohibited by state constitutions or statutes from offering sectarian religious instruction. Reading the Bible and conducting morning exercises are not usually considered by courts as sectarian instruction. If the teacher makes no prejudiced comments and if pupils who object are not required to participate, the courts have usually held that the procedure does not violate legal prohibitions against sectarian instruction or influence in the public schools.[10] A minority view is that any Christian exercise violates the religious views of non-Christians.

Twelve states require daily reading of the Bible; 25 states by statute specifically permit without requiring it, thus making the reading optional; 11 states prohibit daily reading from the Bible by state law, judicial decision, or the attorney-general's opinion.[11]

Altho sectarian instruction is not permitted in the public schools, pupils are frequently excused to attend so-called weekday church schools held under the auspices of religious denominations. Released-time programs differ in practice. The Supreme Court of the United States has reviewed only two types, one of which was held unconstitutional and the other valid. The Champaign, Illinois, released-time program was held unconstitutional;[12] the program in New York, held off school premises with no cost to the school, was held constitutional.[13]

Conway also reported that the attorney-general's opinion in three states permits an elective high-school course of Bible study. Three states by law require the display of the Ten Commandments. In 28 states instruction in morals is either required by law or encouraged by specific statements in the constitution.[14]

In 1949 the NEA Research Division reported that 26.8 percent of the 2639 school systems replying to a questionnaire had some kind of program of religious education. These 708 school systems were divided by type of program as follows: 15.3 percent reported that formal religious-education classes were held in the public schools during school hours; 4.1 percent reported that religious-education classes were held in the school buildings after regular school hours but with no official school participation; 35.0 percent reported that individual pupils were released to attend classes away from the school but with the public school keeping a record of attendance; 33.1 percent reported that individual pupils were released to attend religious-education classes away from the school with the school keeping no record of attendance; 4.2 percent reported that they provided a shortened school session on a given day and dismissed all pupils; 8.3 percent reported different combinations of the above programs.[15]

A few of the religious practices conducted in public schools are morning devotion, hymn singing, reciting the Lord's Prayer, using the Bible as literature, using the writings of great religious leaders both as literature and as models in the use of the English language, teaching the role of religion in the story of mankind, making released time available for sectarian religious education conducted outside the school campus without use of school funds, and studying current religious thought as part of the social studies and current events courses.

Schools offer many opportunities for pupils to become involved in the discussion and practice of moral and spiritual values. Provisions for student government, school assemblies, civic participation, and other co-curriculum activities are made in practically all public schools.

Summary

Opinions of American youth on their own moral values have not changed greatly since 1919, but instances of youth misbehavior are publicized more today than ever before. According to a survey of American classroom teachers, the behavior problems in schools,

[9] For a full discussion of many of the questions that arise over the meaning of separation of church and state see: National Education Association, Research Division. "The State and Sectarian Education." *Research Bulletin* 34: 167-215; December 1956.

[10] Cases are summarized in 5 A. L. R. 866 and 141 A. L. R. 1144.

[11] Conway, Don. "Religion and Public Education in the States." *International Journal of Religious Education*, March 1956. p. 34-40.

[12] Illinois ex rel. McCollum v. Board of Education, 333 U. S. 203 (1948).

[13] Zorach v. Clauson et al., 343 U. S. 306 (1952).

[14] Conway, Don., *op. cit.*

[15] National Education Association, Research Division. *The Status of Religious Education in the Public Schools.* Washington, D. C.: the Associaton, 1949. 35 p.

altho of much concern to teachers, are not as critical as the press and other mediums of public communication indicate.

Only about one-fourth of the public schools have provisions for a planned religious program, but the public schools have always taught moral and spiritual values. The values are an integral part of regular classroom procedures and out-of-classroom experiences thru a wide variety of meaningful experiences. An indirect approach has been more effective than the direct approach of the past. Much experimentation on how to handle religious education continues.

Sectarianism should not be confused with a program of moral and spiritual values. Under our Constitution public schools must be nonsectarian; they are not irreligious.

XI. Teacher Education

Some people say that the academic standards of schools of education are low—their programs of study are of questionable value, and the intellectual qualities of their students are the poorest in the universities.

Discussion of the Charge

The proponents of this charge claim that anyone—with or without proper academic qualification—can enrol in schools of education.[1] Smith cited a report that students in schools of education had the lowest percent passing a national examination given to college freshmen and that seniors in education who took the test did little better than the freshmen.[2] Critics say that schools of education have so completely abandoned the ideals and standards of recognized scholarship that some professional educators view an interest in intellectual, scientific, or scholarly matters as a positive liability in a public-school teacher. They claim that the program of study in a school of education is filled with unbelievable amounts of inconsequentials disguised as academic disciplines.[3] All the troubles which beset public education may be traced directly, these critics say, to the educational training the public-school teachers received in schools of education.

Those who deny this charge state that professional education is still young and has had a hard struggle to win a position equal to that of law and medicine. The schools of education are now staffed by men and women who have excellent cultural backgrounds, excellent professional training, and successful public-school experience. They are capable of training prospective teachers, conducting research, and administering educational programs.

Three factors are pertinent here: (a) administration of teacher education, (b) curriculum of teacher education, and (c) quality of students in teacher education.

Administration of Teacher Education

On July 3, 1839, the first state-supported school for the exclusive purpose of preparing teachers was opened at Lexington, Massachusetts. Up to the early 1900's, practically all administrative functions in a teachers college were performed by the president or by employees under his immediate supervision. During the present century, as enrolments increased, the teachers colleges tended to develop an administrative organization of the type prevailing in liberal arts colleges. In 1926, standards for administrative policies and practices were formulated and adopted by the American Association of Teachers Colleges. By the early 1930's, the majority of these institutions included in their organizations such officials as business manager, dean of the college, dean of men, dean of women, director of athletics, director of health, director of placement, director of training, librarian, registrar, and superintendent of buildings.

The development of the administrative organization of departments of teacher education in colleges and universities is not clear. Between 1830 and 1855 a number of "normal departments" were established but were discontinued. Between 1873 and 1900 a number of universities established chairs of pedagogy which were essentially departments of the lib-

[1] Lynd, Albert. "Quackery in the Public Schools." *Atlantic Monthly* 185: 33-38; March 1950.
[2] Smith, Mortimer. *The Diminished Mind*. Chicago: Henry Regnery Co., 1954. p. 88.
[3] Lynd, Albert, *op. cit.*

eral arts colleges. In spite of these developments there were few special organizational provisions for the education of teachers in the colleges and universities at the end of the century. Thruout the present century there has been a rapid development of teacher education units in the colleges and universities.

The existing diversity in the administration of teacher education is basically a reflection of fundamental lack of agreement over the nature of teacher education itself. There are two major conflicting conceptions of teacher education. One concept holds that teacher education should be a liberal education, that is to say, the students should graduate from a college of liberal arts or its equivalent and take professional study as an extra or at the post-baccalaureate level. The other concept combines liberal education with professional study thruout the undergraduate years, under the general direction of the college of education. This view implies that the jurisdiction of the college of education begins with college admission or not later than the junior year and that all prospective teachers should enrol in the college of education.

Sixty percent of all the universities studied by Stiles[4] in 1945 had separate colleges of education coordinated with other colleges in the university. The overwhelming opinion among those working in the field favors separate colleges of education.

One aspect of the administration of teacher education, often forgotten, is the inadequacy of its fiscal support. When current expenditures for educational and general purposes are divided by the regular-session resident enrolment, the resulting average expenditure per student is $1173 for all universities and $633 for separately organized teachers colleges. Figures are for 1953-54.[5]

Data are not available on university departments of education separately from universities as a whole. That there are larger endowments and a relatively smaller number of students per faculty member in departments other than the school of education are well-known facts.

Curriculum in Teacher Education

Engleman[6] examined the catalogs of 87 institutions which had programs of teacher education and found three professional areas required of prospective teachers in all colleges: educational psychology or human growth and development, curriculum materials and methods, and student teaching. Sixty percent of the schools required history of education and principles or philosophy of education. A course in tests and measurements was required by most of the institutions, and a course in community sociology was common. Requirements in subjectmatter for prospective elementary-school teachers differed considerably. The curriculums for high-school teachers agreed on the need for majors and minors, but few required breadth of preparation. Engleman concluded that teacher graduates of the institutions he studied would have knowledge and skill in both the liberal arts and professional education.

Two major studies of teacher education have been conducted during the past 30 years. They were the National Survey of Teacher Education[7] and the investigation by the Commission on Teacher Education of the American Council on Education.[8]

The National Survey recommended that scholarly mastery of fields be taught and that a sensitivity to social need, knowledge of education, and a revealed competence and development of skill in teaching be emphasized in all schools of education.

The Commission on Teacher Education in 1946 said that

> at least three-eighths of the total time of a four-year program should be given to work designed primarily to promote the ends of general education . . . from one-eighth to one-sixth of that total time will ordinarily suffice for strictly professional instruction.[9]

The amount of time required for professional courses in teacher education programs has often been questioned. Tenney and Law-

[4] Stiles, Lindley J. "Teacher Education: An All-University Function." *School and Society* 62: 220-22; October 6, 1945.
[5] U. S. Department of Health, Education, and Welfare, Office of Education. "Statistics of Higher Education, 1953-54." *Biennial Survey of Education in the United States: 1952-54.* Washington, D. C.: Superintendent of Documents, Government Printing Office, 1957. Chapter 4, Section 1, p. 31; Chapter 4, Section 2, p. 110, 114.
[6] Engleman, F. E. "Common Elements in Teacher Education Programs." *School and Society* 80: 40-41; August 7, 1954.
[7] U. S. Department of the Interior, Office of Education. *National Survey of the Education of Teachers.* Bulletin 1933, No. 10. Washington, D. C.: Superintendent of Documents, Government Printing Office, 1933. 6 Volumes.
[8] American Council on Education, Commission on Teacher Education. *The Improvement of Teacher Education.* Washington, D. C.: the Council, 1946. 283 p.
[9] *Ibid.*, p. 102.

son[10] reported that a typical secondary-education graduate from the College of Education, Southern Illinois University, receives approximately 46 of his 192 hours of instruction from the staff of the college of education. The remaining 146 hours of instruction are received from the staffs of other colleges of the university. The requirement in professional education courses includes 12 quarter hours of student teaching, which means that out of the total of 192 hours required, the future teacher must take only 26 hours of education courses in addition to student teaching.

Trow[11] said that 75 to 85 percent of a student's college course is devoted to "subjectmatter" and about half of the rest to practice teaching. On this basis the requirements for professional courses in the schools of education are not excessive.

An often heard criticism of state certification is that its requirements tend to overemphasize education courses to the detriment of adequate preparation in the teaching fields and subjects. Case said, however, that usually four one-semester courses out of a 40-course undergraduate curriculum meet the professional requirements for state certification.[12]

Armstrong and Stinnett[13] summarized state certification requirements for professional and subjectmatter courses as follows: the median requirement of the states for high-school teachers in professional education courses is 18 semester hours of the 120 usually required for college graduation. For the academic fields, the median state requirements in semester hours are as follows: English, 24; modern languages, 20; mathematics, 18; science, 24; physical science, 18; chemistry, 17; physics, 16; biological sciences, 18; biology, 18; general science, 18; and social science, 24. The median state requirement in education (18 semester hours) is equaled or exceeded by the subjectmatter requirement in nearly every academic field.

In May 1956, the Research Division of the National Education Association reported the opinions of 1000 first-year teachers on their professional preparation. Table 15 shows the proportion of first-year teachers who named various skills and abilities they found they needed in teaching but which they believed were least adequately provided by their college education.

TABLE 15.—PERCENT OF FIRST-YEAR TEACHERS NAMING NEEDED SKILLS AND ABILITIES NOT ADEQUATELY PROVIDED FOR BY COLLEGE TRAINING

Skills, abilities, knowledge	Elementary-school teachers	Secondary-school teachers	All teachers
1	2	3	4
Methods of teaching	49.7%	37.6%	45.3%
Controlling and disciplining pupils	22.6	30.9	25.6
Providing for individual differences	12.9	15.2	13.7
Keeping official records and reports	8.0	7.7	7.9
Organizing classroom schedules	8.9	4.4	7.3
Individual skills—musical, vocal, artistic	6.7	4.7	6.0
Understanding children	4.2	7.2	5.3
Knowledge of subjectmatter	3.0	8.0	4.8
Using tests and measurements	3.3	4.7	3.8
Dealing with parents	4.9	1.4	3.6
Grading, evaluating student progress	2.2	5.8	3.5
Knowledge of phonics	5.2	...	3.3
Counseling, guidance	0.9	5.2	2.5
Using audio-visual aids	2.2	3.0	2.5
Handling extracurriculum activities	0.2	2.8	1.1
Miscellaneous	8.8	14.1	10.7
Number of respondents	638	362	1,000

Source: National Education Association, Research Division. *First-Year Teachers Evaluate Their Preparation for Teaching.* Washington, D. C.: the Association, May 1956. p. 3.

Teachers in both elementary and secondary schools indicated that the greatest lack in their training was in methods of teaching. Less than 5 percent reported a lack of adequate provision for knowledge of subjectmatter in their teacher-education programs.

Quality of Students in Teacher Education

The schools of education control the quality of their students by selective admissions and selective retentions. The selective admissions factors used by a great number of teacher-education institutions are completion of high-school course; scholarship in high school; rank in high-school class; completion of certain prescribed subjects in high school; scores earned

[10] Tenney, Charles D., and Lawson, Douglas E. "The Liberal-Arts Man and the Professional Educator Look at the Problem Together." *Educational Forum* 20: 437-42; May 1956.

[11] Trow, William Clark. "'Basic Education'—Facts and Fallacies." *School and Society* 85: 86-88; March 16, 1957.

[12] Case, Gilbert E. "Quackery in the Public Schools." *Atlantic Monthly* 185: 57-60; June 1950.

[13] Armstrong, W. Earl, and Stinnett, T. M. *A Manual on Certification Requirements for School Personnel in the United States.* 1957 edition. Washington, D. C.: National Education Association, National Commission on Teacher Education and Professional Standards, 1957. p. 12.

on examinations including entrance examination, statewide tests, intelligence tests, scholastic tests, teacher-aptitude tests, reading tests, and personality tests; recommendations from persons, such as the high-school principal and high-school teachers; personality ratings following interviews; health; and speech. Selective retention is ordinarily a matter of maintaining a required scholarship status and of passing certain subjectmatter examinations.

The quality of the students enrolling in the schools of education varies widely from one institution to another. Sabol,[14] carrying out his study for the New York State Department of Education, gathered information on 98 percent of all high-school seniors in 11 New York counties. He found that 73 percent of the students planning to enter teacher-education institutions were in the upper 50 percent of their graduating class, that 60 percent of the same students had an IQ above 110, and that 89 percent had an IQ above 100.

The College of Education of the Louisiana State University reported by letter that its junior and senior girls in 1949-50 were in the upper 15 percent of their high-school graduating class; junior and senior girls in all teacher-education divisions (both public and private) in the state of Louisiana were in the upper 19 percent of their high-school graduating class. At the spring commencement of 1957, three of the university's eight honor graduates (37.5 percent) were from the college of education. Students from the college of education comprised only 20 percent of the total graduating class. The valedictorian of the entire university graduating class was from the college of education.

College of the Pacific, Stockton, California, reported by letter that altho teaching credential candidates constituted only about one-third of the total student body, 57 percent of the academic honors designations were received by teaching credential candidates in 1954-55; in 1955-56, they received 61 percent of all academic honors and designations; and in 1956-57, 67 percent of all academic honors and designations.

Wooster and Stover[15] made a study of the graduates of Ohio State University in December 1953. They found that the graduates in education rated, in general, above average in the scale of scholastic ability.

On the other hand, Traxler[16] compared the average test records of freshmen in teachers colleges, other four-year colleges (mostly liberal arts), and junior colleges from 1935 thru 1944. He found that the average scores on the American Council on Education Psychological Examination in the teachers colleges were lower than those in other four-year colleges.

Summary

Comparatively, teacher-education units in colleges and universities are of recent development. Criticisms of schools of education continue from many sources, particularly the schools of education themselves where there are continuous demands for improved resources and curriculums.

There are two major types of teacher-education institutions: One is the teachers college maintained by a state government for the exclusive purpose of educating teachers. The other type is the department of teacher education established within a college or university. The organization and administrative practices of schools of education vary greatly; in general, they are less generously financed than other institutions in higher education.

Surveys revealed that the number of professional courses in teacher-education programs, on the average, is not excessive and that state certification requirements do not overemphasize professional educational courses to the extent claimed by critics of teacher education.

Students of high academic quality are being selected and can be selected for schools of education. There are examples of schools in which students from colleges of education lead all other students in honors conferred. On the other hand, mass testing of college freshmen on a national scale has revealed that average scores for freshmen in teacher education are below the average for all freshmen.

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[14] Sabol, Edward A. *Factors Relating to Post High School Educational Plans of New York State Youth: An Analysis of 20,734 Cases in 1953.* Doctor's thesis. New York: Teachers College, Columbia University, 1954.

[15] Wooster, George F., and Stover, W. Wallace. "A Note on the Caliber of Education Graduates." *Educational Research Bulletin* 33: 155-57, 167; September 15, 1954.

[16] Traxler, Arthur E. "Are Students in Teachers Colleges Greatly Inferior in Ability?" *School and Society* 63: 105-107; February 16, 1946.

HIGH POINTS

- Public education is founded on the principle of public control with professional administration of the schools.
- Broadly, progressive education means educational progress thru continuous experimentation based on valid and reliable research.
- Life adjustment education emphasizes individualized education to meet the needs of all American youth, without minimizing intellectual training.
- Promotion practices vary from school to school; few schools practice automatic promotion.
- Altho the number of cases in juvenile courts has increased since World War II, teachers report that classroom delinquents total, at the most, less than 1 percent.
- Larger numbers and larger percents of American youth are now studying both modern and classical foreign languages than in 1900.
- Larger numbers and larger percents of American youth are now taking courses in mathematics and science than in 1900.
- State-level plans for gifted children are almost nonexistent. Many school systems, however, provide informal classroom programs for the instruction of gifted children. There are practically no programs for educating and certifying teachers of gifted children.
- Altho the public schools may not provide religious programs, they do make moral and spiritual values an integral part of regular classroom procedures and out-of-class experiences.
- Professional courses in teacher-education programs, on the average, are not excessive, and state certification requirements do not overemphasize professional education courses.

EVERY phase of the educational process, especially in our system of public schools, is important to all.

Teachers need our active support and encouragement. They are doing one of the most necessary and exacting jobs in the land. They are developing our most precious national resource: our children, our future citizens. They can do their best only as we show them our appreciation and offer them our individual help.

We hear a lot about the deficiencies and woeful conditions of education in America, a criticism that suggests a few questions. How many parents have visited their children's schools? How many parents have offered to relieve some of the routine burdens of the teachers, or invited them to a friendly supper at home? How many parents have tried to make the teacher a real partner in the responsibility—and the priceless privilege—of educating our children?

—Dwight D. Eisenhower. Speech at the NEA Centennial Birthday Party in Washington, D. C., April 4, 1957.